

EUROPEAN NEWS

Malta's leader shifts policy to ease economic problems

BY GODFREY GRIMA IN VALLETTA

MALTA'S NEW Prime Minister Dr Carmelo Mifsud Bonnici appears to have plumped for reconciliation as the most effective weapon with which to defeat the island's economic problems particularly unemployment and lack of industrial investments.

This is the impression gained by those who have dealt with him since he assumed office last month after Mr Dom Mintoff decided to step down as Prime Minister and leader of the ruling Labour Party.

Signs of a significant shift in attitudes were first noticed late in December when Dr Mifsud Bonnici launched his own personal diplomatic initiative to repair relations with Italy, Malta's closest ally at the EEC and a former guarantor of its defence.

Relations, after acrimonious disputes over countertrade and unutilised grants, were further soured by a Maltese ban on trade and a decision by Mr Mintoff to consider a defence treaty with Libya more worthy than with Italy. The wrangle put Malta's defence arrangements exclusively in the hands of Libya and the Soviet Union, despite the island's claimed neutrality.

Dr Mifsud Bonnici, who likes to keep a low profile, assured that no

further public wrangling takes place by keeping proposals for new trade and defence arrangements secret. In the words of a close aide it was sufficiently prudent for the Italians to be made aware there had been changes in Malta. Dr Mifsud Bonnici's handling of the row proved successful enough for a new agreement to be possible by the end of this month.

Malta's Chamber of Commerce and the Federation of Industry, two stalwart representatives of private industry which had been virtually locked out from government economic planning, seem pleased by the Prime Minister's tilt towards reconciliation.

The Chamber of Commerce had been threatened by legislation creating a rival Government-sponsored Chamber of Commerce and Production and the Federation of Industries had been frustrated by a hostile government attitude.

A meeting that took place with Chamber representatives earlier this month "opened the windows" on the possibility of private industry and the state dovetailing their efforts to promote a more productive investment climate.

Peter Bruce reports on West Germany's telephone travails

Cordless connection to chaos

HERR Christian Schwarz-Schilling has one of the broadest smiles in West German politics. As Bundespost (post and telecommunications) minister, in Chancellor Helmut Kohl's centre-right coalition, and therefore responsible for dragging an only mildly enthralled country into the new world of information technology, he uses it a lot.

He did last November 26, when he launched the nation's cordless telephone network by making a call to the Government's chief spokesman, Herr Peter Boenisch, who also smiles a lot. For just an extra DM 33 (£10.80) a month, the local Press reported, you could have a telephone, code-named Sinus, and make calls up to 200 metres away from the normal telephone connection or extension.

The ministry, he said at the time, had taken quite a long time to introduce the system because it had wanted to make sure it got the technology right.

The cheaper Far Eastern versions were easy to bug, he said. Predicting a boom in orders, he warned that "German manufacturers will have to make an extra effort to keep up with demand."

He promised an initial output of 30,000 units, with full production coming on stream this March, and contracted manufacture of the Sinus out to four local producers.

Something, however, has gone terribly wrong. Not only has



Herr Schwarz-Schilling: no smiles now for the cordless telephone.

Herr Schwarz-Schilling been told that the introduction of the new telephones may have been illegal, they do not work properly either.

The technical problem, if not the most important, must certainly be the most embarrassing, and not only for the minister, whose spokesmen have been pushed forward to promise new, improved versions by May.

Sinus has been bugged. The Post Ministry has admitted that cordless conversations can be overheard on transistor radios. It transpires that the two "buggable" models, produced by AEG and Stabo, use Japanese technology.

A third model, made by Hagenek and using only West German technology has been pronounced secure and orders from the producer have been raised from an initial 7,500 to 15,000. Siemens, the fourth contracted producer, has not yet put its model on to the market because of problems with a U.S. designed component.

Far more serious for Herr Schwarz-Schilling, however, was the attack in a letter from the Bundespost users' association on Monday, which accused him of misusing the Bundespost monopoly by only certifying certain companies to produce Sinus and then for imposing the

"horrifying" extra rental of DM 38 a month.

The association's criticisms have followed in the wake of an even more daunting threat in the form of Herr Martin Bangemann, the Economics Minister.

Herr Bangemann, according to Economics Ministry watchers, has been dying to take a shot at the Bundespost monopoly on a wide range of equipment, and discovered soon after the Sinus launch that he had been handed the perfect opportunity.

Strictly speaking, Herr Bangemann should have had the final say on the introduction of Sinus. He did not, and, it seems, will not until he wrings some monopoly concessions out of Herr Schwarz-Schilling. Not only that, someone tipped off the European Commission's anti-trust officials and Herr Bangemann, recently returned to domestic from European politics, has warned that the Bundespost might even be taken to court by Brussels.

Bundespost officials held talks with the Commission in Brussels yesterday and appear to have been told in no uncertain terms that Herr Bangemann's warnings are well-founded.

Herr Schwarz-Schilling and Herr Bangemann are apparently due to meet in the next week or two to discuss ways out of the Sinus impasse and any smiles on that occasion will be tight indeed.

W. Germans to determine policy on space

BY PETER MARSH IN LONDON

WEST GERMANY'S Cabinet meets today to decide on the country's space policy amid signs that France could provoke a disagreement among West European nations over the correct strategy for joining the U.S. scheme to build a manned space station.

France could cause a split among the 11 member nations of the European Space Agency over its desire that the development of Hermes, a small manned spacecraft, should figure prominently in the agency's long-term programme.

Ministers from the 11 countries meet in Rome in a fortnight to ratify a West European space strategy for the next 10-15 years. According to proposals from Bonn, France-based officials, the agency's annual budget would increase by about 50 per cent over the next five years from its current level of \$700m. France and West Germany between them account for nearly half the agency's spending.

Much of the extra spending would be on Columbus, a European-built module that plugs into the U.S. space station. In a second new project, engineers would start work on Ariane-5, a more powerful version of the current generation of Ariane. Western Europe's satellite launcher.

France, however, would like ESA to give equal prominence to Hermes, a miniature version of the U.S. space shuttle which would be carried into orbit on top of the heavy-duty Ariane-5. The French space agency (CNES) thinks Hermes would be essential to act as a supply vehicle for the European component of the U.S. station.

A top CNES official confirmed yesterday that France wants development of Hermes to proceed in step with construction work on Columbus, in which West Germany is to play the leading role.

Work on Hermes would cost \$1.3bn, according to CNES. France would put up the lion's share of the cash. The vehicle would enter operation around 1996, two years after the end of work on Ariane-5.

Other ESA members, led by West Germany, are less enthusiastic. They argue that decisions to develop Hermes can wait until later in the decade.

The countries think that, at least in the immediate period after the space station starts operation in 1992, Western Europe will find it sufficient to use the services of the U.S. space shuttle fleet.

The U.S. shuttles, of which four will be in service later this year, will ferry people and materials between the Earth and the orbiting base. Applications of the space station, which is due to cost the U.S. Government \$8bn, include experiments in materials processing, biological studies and observations of the earth.

Officials in France think it imperative to make Western Europe independent of the U.S. in all important aspects of space technology. The country sees Hermes as a logical extension of work on Ariane, a conventional rocket that takes into orbit payloads such as communications satellites. France has contributed 70 per cent of the \$750m Ariane has cost to develop over the past decade.

Without Hermes, Ariane will not be able to carry people. The small space aircraft would enter orbit powered by Ariane's expendable rocket engines. It would return to earth, after docking with a space station, using its own booster motors.

Apart from the different views on Hermes, the West European nations are generally agreed on most aspects of a long-term space policy. There is some unanimity on the need to join in the U.S. space station programme, on the grounds that this could give Western Europe experience in building large space structures that could be important early next century.

Such structures could be used, for instance, for space factories that turn out exotic substances in zero gravity or as a base for big networks of antennas for telecommunications.

According to figures from ESA officials, the projects to develop Columbus and the new version of Ariane would each cost \$1.7bn over 10 years. France is prepared to contribute 58 per cent of the cost of Ariane 5. It will provide 15 per cent of the cash for Columbus.

West Germany's share of these programmes is likely to be about 20 per cent and 35 per cent respectively. The figures are likely to be ratified by the Cabinet meeting in Bonn today.

Other leading paymasters for Columbus will probably be Italy (25 per cent) and Britain (10-15 per cent). The other ESA countries - Spain, Sweden, Switzerland, Denmark, Eire, Belgium and the Netherlands - will put up the rest.

At the Rome meeting, ministers will probably agree to a two-year feasibility study for Columbus rather than commit themselves fully to joining in the U.S. space station venture. In this study, to cost about \$50m, engineers would try to quantify the benefits to Europe from work on the station.

During this preparation stage, ESA would also attempt to work out a binding legal agreement with the U.S. over the conditions of joining in the programme. This would, for instance, set out the share that Western Europe would be asked to contribute to maintenance costs for the station. These costs have yet to be worked out but could be very high - up to \$2bn a year.

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Norway to pay for seabed survey

BY FAY GJESTER IN OSLO

NORWAY WILL pay the Nkr 12m (\$1.3m) bill for seismic surveys this summer, aimed at finding out whether the seabed between Iceland and Jan Mayen Island is worth exploring for offshore oil and gas.

Norway agreed to pay for the surveys in a deal with Iceland several years ago which settled the two countries' overlapping continental shelf claims. Jan Mayen Island is Norwegian.

As part of the agreement, Iceland will be entitled to a quarter of any oil or gas Norway may find on its side of the continental shelf boundary.

The survey programme, finalised in recent talks between the Icelandic Government and the Norwegian Petroleum Directorate, will take about a month.

The data collected will be offered for sale to interested oil companies. Their purchases could well yield more than the cost of the survey. Iceland will get part of any profit which the directorate may make.

If the initial seismic survey should show promising areas, more detailed surveys will be carried out. Exploration drilling is unlikely until late in the 1990s.

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EUROPEAN NEWS

Commission offer threatens to dilute milk superlevy

BY IVO DAWNAY IN BRUSSELS

THE EEC's new Agriculture Commission, Mr. Frans Andriessen, yesterday sought to clear away obstacles to the full application of measures adopted by governments nearly a year ago, designed to curb the Community's excessive milk production.

In a gesture aimed at thawing the icy relations on the issue between the Commission and agriculture ministers, was to offer a number of technical adjustments to the milk restraint regulation, long sought by several member states.

The unstated *quid pro quo* was that member states will lift their refusal to pay the levy on surplus production which

was due last month for the first six months of the April-to-March marketing year.

But, as so often, the price of the compromise could be further dilution of the impact of the levy on the producers themselves. Parts of the technical adjustments, if approved by a special committee on agriculture, would mean that both the UK and France will, for the agricultural year ending in March, be exempt from paying any levy whatsoever, thereby deferring the full impact of the quota.

The significance of the super-levy issue goes way beyond the dairy farms and right to the core of the reform of the common agricultural policy (CAP).

At the beginning of 1984, milk production looked set to hit 108m tonnes despite demand of only 87m, at a cost of Ecu 3.4bn (£2bn) or 21 per cent of total CAP expenditure. Disposal of every tonne of surplus butter or skimmed milk powder

on world markets was set to cost the taxpayer about £1,000. After agonised negotiations, the farm ministers agreed to restrain output to 99m tonnes this year (still 14.5 per cent above demand) by means of a punitive tax or levy on every farmer exceeding his allotted quota.

But the scheme, aimed at reducing each producer's output by an average 7 per cent, provoked a storm of protest across Europe and a marked weakening in the ministers' determination to see such a politically unpopular measure pushed through.

Mr. Andriessen's peace moves are aimed at unblocking the

impasse. They will allow:

- West Germany short-term tenant farmers to transfer their quotas;
- British and Belgian farmers more flexibility in allocating milk supplies between direct sales and marketing organisations;
- The use of an alternative reference year for assessing quota levels in special circumstances alongside concessions to specialist dairies in problem areas;
- Most exceptionally, for just one year, the offsetting of over-producing regions against under-producers — a move dangerously close to the institution of national quotas.

But even if this means member states will now pay up, several questions remain. Italy, despite being the current president of the Council, has failed to take any serious action to introduce the system. Ireland is threatening to scupper any compromise if its demand for a 58,000-tonne increased quota is not met. Moreover, there are still no clear indications that the levy will be firmly paid and established by the next price fixing session in March.

On the positive side, however, there is now clear evidence that the levy is biting as production in the first six months alone has fallen by 42 per cent and the reduction should accelerate.

New Caledonia leaps from the footnotes into the headlines

BY DAVID HOUSEGO IN PARIS

NEW CALEDONIA has remained a footnote in French press coverage of world events for most of its 130-year history under the rule of France. Few Frenchmen have known exactly where the tiny territory in the South Pacific is situated and fewer still have visited it.

But benign neglect was only possible while accompanied by tranquility. This was rudely shattered when the first outbreak of violence on the islands in the autumn flashed a warning to France. The indigenous Melanesian (Kanak) population was clamouring for independence a lot faster than the French Socialist Government, its right-wing predecessor or the European settlers who account for 40 per cent of the 145,000 population, had anticipated.

It has been even more rudely shattered by the events of the past few days which have seen rioting in the capital Noumea, the killing of one of the independence leaders and the proclamation of a state of emergency.

The temperature was raised further yesterday by the accusation by Jean-Marie Tjibaou, the more moderate of the separatist leaders, that M. Eloi Machoro—killed by a bullet fired by a member of France's crack anti-terrorist squad—was "murdered" with the agreement of M. Edgar Pisani, the government's High Commissioner on the island.

M. Tjibaou said that M. Pisani's proposals, announced a week ago to grant the territory independence in association with France had been jeopardised by the fact they stemmed from a man whose "hands bore the smell of blood".

The politically explosive

charge for President Mitterrand's Socialist administration that M. Machoro's death may not have been an accident, and did not displease the French authorities who wanted to be rid of a difficult extremist, was supported yesterday by the newspaper, *Liberation*.

Accusations like that stir memories of the Algerian war—the last colonial conflict to cast a shadow over French politics.

Comparisons with Algeria still seem far fetched. But they have been growing. The right-wing daily *Le Quotidien* yesterday recalled that the Algerian war had brought about the collapse of the Fourth Republic and the return of Gen. de Gaulle. *Le Monde* also carried a report from Algeria yesterday quoting Algerian press as saying: "History is repeating itself. The same words. The same deeds..."

For M. Mitterrand the damaging aspect of the disorder in an outlying territory is that it again reflects badly on the competence of his government.

For the opposition, the Government's difficulties in New Caledonia are providing fresh ammunition. After denouncing the Pisani proposals, the neo-Gaullist RPR, the largest opposition party which also has a majority among European settlers in the territory, is calling for all-party talks on the issue and for M. Mitterrand to take charge of it himself.

M. Mitterrand will have another chance to explain his views tonight in a television broadcast on domestic politics and the economy. But the flare-up of passions in the territory has further narrowed his room for manoeuvre.

Delors passes his first test with European Parliament

BY PAUL CHESBRIGHT IN STRASBOURG

M. JACQUES DELORS and his new European Commission have passed their first test in the approach to what M. Delors calls "achieving consensus and convergence of will, to acting and succeeding."

Yesterday the Parliament gave the new Commission and its political thrust, outlined by M. Delors in a speech on Monday, its approbation by 207 votes to 34, with 37 abstentions. But the numerical triumph of M. Delors looked bigger than it actually was: 156 members did not bother to vote.

Parliament itself had seen the appearance of M. Delors, with his inaugural speech, as akin to the investiture of a new government—a constitutional nonsense, because Parliament can fire a Commission but has no role in its appointment.

But the event was significant in the sense that if the Commission is to prove more effective than its predecessor it needs the co-operation of the Parliament. And the two bodies are, by virtue of their multi-national characteristics, natural

allies against the national interests embodied in the Council.

However, all three institutions need to co-operate in breaking the decision-making logjam in which the EEC finds itself. It is this that M. Delors meant in his reference to consensus and convergence. But he has so far only sketched out in vague terms his strategy for achieving progress on the economic and social objectives he is setting for the Community.

During his inaugural speech he produced the accepted diagnosis. The institutions pass the buck to each other (as in the case of the budget—there is none for 1985 so far). The Community suffers from "the tit-for-tat approach" of the Ten: too much linkage, too many package deals.

M. Delors' approach is two-pronged: to identify improvements which can be made within the framework of existing rules and then decide to do them beyond the Treaty of Rome. The Commission will make full use of its rights of initiative. It will attempt to act as honest broker in institutional quarrels.

Parliamentarians rather liked this. Speakers from differing political persuasions in yesterday's debate were all anxious that the Commission should play a more independent role.

But M. Delors' speech was carefully couched to give something to everybody. When the debate took place, the main thrust was not questioned, only the emphasis differed according to ideological background.

strength. But he was very careful not to try to secure the support of the Left and to demonstrate his continuing Socialist credentials by stressing that efficiency has to be balanced by justice.

So that, in a suggestion which will be unpopular with the Confederation of British Industry and other employers organisations, he called for European collective bargaining agreements. They would be, he said, "a spur to initiate, not a source of paralysing uniformity." This is all part of what he sees as "an economic and social area"—a concept which sees the Ten as moving closer together so that there is greater readiness and ease in undertaking, for example, joint research efforts, and joint industrial efforts based on common standards to promote innovation.

The EEC has already started this with the Esprit programme for information technology and in a different way, with a joint telecommunications approach. It seems likely that the Delors

Commission will seek more industrial programmes blending EEC and private sector money.

All of this is in itself a push to harmonisation, to the fusion of ten markets into one.

He was against accompanying efforts to make progress in the industrial and wider monetary field, with any dismantling policy—a ritual defence of the CAP which does not deny the need for further reforms.

On the budgetary future of the Community, he made it clear that, in spite of the agreed increase in the EEC's budget ceiling, still more cash would be needed.

"In certain cases would not an extra ten Ecus in the Community budget have a greater multiplier effect than an extra Ecu in the budget of each of the ten member states?" he asked. Behind that is the thought which has animated successive Commissions and which provided the starting point for the Community itself: that collective action in many areas is more effective than separate national policies.

Belgian cruise decision expected by end of March

BY REGINALD DALE IN WASHINGTON

BELGIUM WILL make a decision by the end of March on deploying its share of Nato's new American cruise missiles, but will not necessarily begin immediate deployment. That appeared to be the position yesterday, following a visit to Washington by Mr. Wilfried Martens, the Belgian Prime Minister, which left considerable confusion as to his precise intentions.

Mr. Martens denied telling Flemish television on Monday night that his Government had decided against deployment in March, when the first of the country's 48 missiles were due to arrive. He said that no decision would be taken until further consultations had been held with his country's Nato allies.

Belgian officials also denied that Mr. Martens had suggested that deployment might not begin until 1987. Mr. Martens said yesterday that all the missiles would be in place by 1987, the date the deployment is due to be completed, and that only the starting date was in question.

It seems unlikely, however, that deployment will begin in March, given that Mr. Martens said that the Government's decision at the end of that month would then have to be submitted to Parliament, where it will face tough opposition.

Washington, President Ronald Reagan pressed Mr. Martens strongly to go ahead with the deployment on time, so as to strengthen the U.S. hand in the new round of arms talks with Moscow agreed in Geneva last month. The U.S. be-

French jobless total rises by 13.4%

By Our Paris Correspondent

FRENCH unemployment rose by 13.4 per cent last year on a seasonally-adjusted basis to 2.48m, the Ministry of Labour announced yesterday.

It was the largest increase since the Socialists came to power in 1981 but broadly in line with official expectations since industrial restructuring was pushed more rapidly forward at the beginning of last year.

The sharp rise, however, has brought the Government under attack from within the Socialist ranks, as communist parties and strongly contributed to its loss of popularity.

President Francois Mitterrand will be questioned on this problem in his television broadcast tonight.

The 13.4 per cent growth in unemployment last year compares with a 4.5 per cent increase in 1983 and a 5.2 per cent rise in 1982—years in which the government pursued an active policy of holding down the number of jobs. The increase last year, however, was well below the 23.6 per cent recorded in 1981.

The official figures show that notwithstanding the government's attempts to help the young, 1.1m persons or 41 per cent of those unemployed are under 25.

Though the pace of unemployment sharply increased over the year, the rise was concentrated in the first half. The number of unemployed rose by 205,000 in the first six months as compared with 76,000 in the second half.

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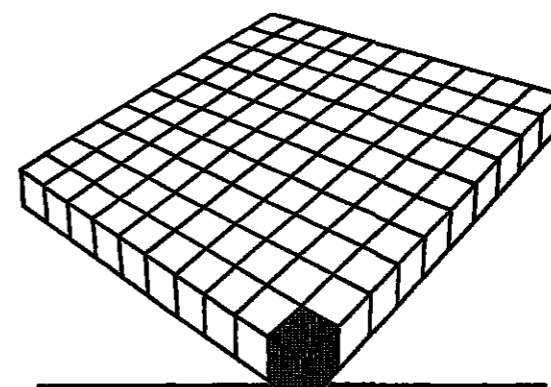
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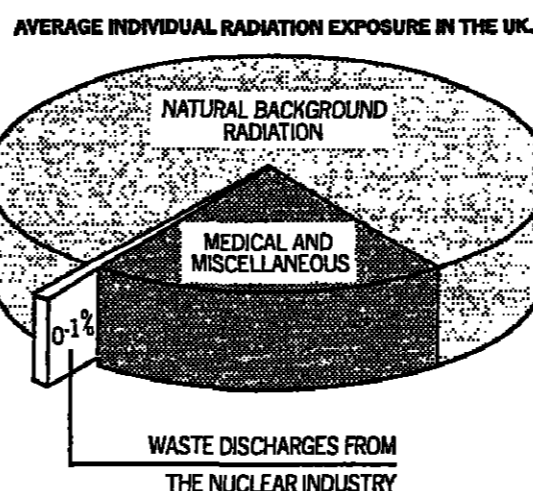
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WORLD TRADE NEWS

Leyland in tough battle for \$520m Thai bus contract

BY CHRIS SHERWELL, SOUTH EAST ASIA CORRESPONDENT
AND BOONSONG KTHANA IN BANGKOK

A BRITISH consortium led by Leyland Bus is pitted against tough competitors from Belgium, France, Spain and Japan for \$520m (£465m) contract to transform the vast public bus operations in the Thai capital of Bangkok.

Tenders had to be submitted to the Bangkok Mass Transit Authority (BMTA) by yesterday afternoon. Of the original dozen parties which showed interest in the deal, five have submitted bids and the fight for one of the most lucrative and prestigious bus contracts is now well and truly on.

Leyland Bus is teamed with the National Bus Company, Britain's state-owned bus corporation which runs a fleet of 14,000 buses, profitably, and MVA consultants of London, which has already done a preliminary study in Bangkok. The consortium's financial advisers are Wardleys of London.

The other contestants in what is bound to be a bruising battle are Van Hool of Belgium, which is believed to be teamed with Volvo of Sweden, Renault of France, Pegaso of Spain and Singapore Motor Leasing, which is thought to be related to either Hino or Isuzu of Japan.

The main surprise in the tender is the absence of the West Germans. Neither Mercedes Benz, which currently dominates the Thai rural bus market,

nor Man appear to have followed up their earlier keen interest.

The contract itself is to re-organise and re-equip the BMTA's operations — the agency's services carry more than 5m passengers a day. The British proposal involves the supply of 2,500 Leyland buses, including many double-deckers, the construction of 24 bus depots, the development of a training programme and a reorganisation of BMTA's management structure.

At the same time the agency's financial woes — it carries a heavy debt burden and is losing money at the rate of more than Baht 2m (£66,000) a day — are to be ended, preferably without a change in fare structure. The BMTA is already reckoned to be close to bankruptcy.

Bidders have submitted separate technical and financial proposals, and yesterday Mr Pichate Satirachaval, the managing director of BMTA, said that a seven-man committee of government officials would be formed tomorrow to consider the submissions.

Bodymakers Van Hool together with chassis-builders Volvo are likely to offer the British team the toughest opposition. Leyland is offering to assemble most of the buses from vehicle kits manufactured in the UK.

Nigeria pays first interest on trade debt

By Patti Waldmeir in Lagos

THE CENTRAL BANK of Nigeria has made its first interest payment on some \$250m (£223m) in promissory notes, issued to major creditors last November, as the first stage in rescheduling several billion dollars in overseas trade debts.

Some \$32m in interest, representing interest backdated to January 1 1984, has been paid on the notes, which cover only a fraction of total arrears.

A second issue of a further \$120m in promissory notes representing non-dollar debts to the same creditors, covered under the first issue, has been delayed and is not now expected until sometime next month.

Nigeria has built up huge trade arrears over the past few years as falling oil prices have depressed the country's foreign exchange income and gravely weakened its ability to pay overseas suppliers.

Head of State Maj-Gen Muhammad Buhari said when presenting the 1985 budget on January 1 that trade arrears now total some Naira 4,760n (\$8.5bn) but some bankers believed this figure refers only to uninsured debts with insured debts representing perhaps a further \$2bn-3bn.

Nigeria agreed terms last April with some 350 creditors to refinance uninsured debts, Western export credit agencies have so far blocked agreements on insured debts until Nigeria reaches agreement with the International Monetary Fund (IMF) on an economic recovery programme.

Nigeria's Central Bank is not expected to issue notes to cover the bulk of uninsured debts until later this year, perhaps in April, when it will have completed the current process of checking the validity of debts against its own records.

Bankers in Lagos said they believe delays in issuing the notes so far did not reflect a reluctance on the part of Nigeria to accept valid claims but stemmed from the enormous volume of work involved in cross checking hundreds of thousands of claims.

Nigeria has issued import licences valid through 1985 to a number of major Nigerian companies involved in priority sectors.

The case for a UK export bank

Following this week's big hike in British lending rates, Christian Tyler, Trade Editor, explains why some City bankers are pushing for a new export lending institution



Mr Kit Farrow—Assistant Director of the Bank of England

With borrowing and lending powers, the Government asked the Bank of England, the Treasury and ECGD to investigate the merits of a new institution. That investigation begins shortly.

At first sight, the concept looks superfluous — and indeed is still regarded as such by some of the bigger banks who have made a reasonably profitable business out of extending credit whose repayment is guaranteed 100 per cent by the ECGD.

The commercial banks, who have been asked to send submissions to Mr Kit Farrow, assistant director of the Bank of England and his team, will say that they can already borrow and lend at the finest rates — so why create a new, possibly monopolistic, institution?

But according to the sponsors of the scheme, an export bank would be able to do even better. It would be able to raise funds in the Eurobond market, where it would enjoy the

highest rating by virtue of having virtually all of its onward lending insured by the ECGD. If, as is being suggested, the Bank of England were to be one of the shareholders — with, say, a 15 or 20 per cent stake — the Bank would be virtually a sovereign borrower.

Secondly, so the argument goes, an export bank would be able to raise funds on a continuous basis, but would disburse the cash for individual projects in the staggered fashion that export business demands.

That would overcome the difficulty of matching the requirements of the Eurobond investor with the needs of the export lender and his overseas client.

The bank would have no Government subvention, only the "pure cover" insurance of ECGD already provided to individual banks who forego the interest rate make-up system regulated by the OECD agreement.

Another claimed advantage

Japan and U.S. fail to finalise steel curbs

THE U.S. and Japan failed yesterday to work out details of an accord under which Japan will limit steel exports to the U.S., Reuter reports from Tokyo.

A Ministry of International Trade and Industry official said: "There was additional progress, but there was no overall agreement."

The two countries agreed last month that Japan would restrict steel exports to 5.8 per cent of U.S. consumption. But after three days of talks they remained at odds over when the accord would go into effect, how long it would last and how the total share would be apportioned among different steel products.

He said the U.S. wanted a five-year pact, but Japan would like to see it reviewed at shorter intervals.

He also said it would be difficult to put the accord into effect retroactively from October last year, as sought by the U.S. Further talks would be held next month.

A Japanese consortium led by Mitsubishi Heavy Industries submitted the lowest bid, \$335m (£299m), for a large power plant to be built in eastern Saudi Arabia, industry officials say.

U.S. in move to boost Portuguese economy

BY DIANA SMITH IN LISBON

A U.S.-Portuguese foundation has been established to promote and finance the development of the Portuguese economy.

The foundation will be run by appointees of the U.S. and Portuguese Governments, and has an initial sum of \$40m (£36m) to begin work.

It will foster co-operation and investment in Portuguese industry and business, science and education, and in some respects supersede the activities in Portugal of the official U.S. Agency for International Development.

for a bank is that it solves the problem of access to long-term, fixed-rate currency markets especially in, say, Swiss Francs or Japanese Yen, where outsiders are made to feel unwelcome because of the competitive threat to Swiss or Japanese exporters.

To a large extent the viability of an export bank will depend on the Consensus system becoming redundant, at least in terms of permitting export loans at rates better than the market can provide.

An export bank could also it is said, lend low interest rate currencies at their true rate, slicing a fraction off the cost that the exporter would have to bear if he took the officially supported Consensus route.

Sceptics in the City point out that an export bank could find itself in difficulties if the Consensus system failed to die a natural death.

Behind that scepticism is the fear that an export bank would siphon off much of their own business, leaving the major banks as reluctant shareholders in a company whose long-term profitability was questionable.

The other fear is that a private bank, however fully insured by government, might not command — or might cease to command — the exceptional credit rating on which its treasury management operation would so crucially depend.

None the less, the idea has gained a foothold. And it can safely be predicted that the idea proves commercially viable and politically attractive, all the export finance houses — large and small — will be jostling defensively for a share of the action.

Sweden to take stake in U.S. steel plant

By Kevin Done in Stockholm

UDDEHOLM OF SWEDEN, one of the world's leading manufacturers of tooling steel, is to take a 20 per cent stake in a new \$15m special steels plant in the U.S.

The plant is to be built in a joint venture with Elwood City Forge and will be located in Newcastle, near Pittsburgh. The plant will have a capacity of 50-60,000 tonnes a year and is expected to be in production by the end of the year. The plant will be built with Swedish technology with an arc furnace and a vacuum degassing furnace to be supplied by Asea on orders worth around SKr 60m (£5.9m).

Uddeholm, the third largest European maker of tooling steel after Thyssen Edelstahl of West Germany, and Vöest-Alpine of Austria is concerned that U.S. steel quotas will hinder its further growth in North America, where it currently accounts for some 10-12 per cent of the U.S. market.

Uddeholm's future growth in the U.S. will be based on the 5,000-6,000 tonnes of tooling steel it will take from the joint venture. It already exports to the U.S. some 10,000 tonnes of tooling steel a year.

It is aiming for a 50 per cent growth in its U.S. business over the next three to four years with growing sales in plastic mould steels.

David Brown in Stockholm writes: Asea, the Swedish electrical engineering and electronics group has won two turnkey contracts worth a total SKr 150m (£14.8m), to provide power management systems to Colombian utilities in Bogota, Medellin and Guadalupe.

The equipment, which includes three computers, a number of printers, and software will allow centralised control of the energy distribution between some 85 power stations and sub stations and will be installed and commissioned by 1987.

Sandvik, the Swedish cemented carbide and specialty steels group has won a SKr 50m order from the Soviet VAZ tooling factory, 100 miles East of Moscow to supply technical training and advanced metal cutting tools for motor vehicle production. Cemented carbides are extremely hard cutting tools.

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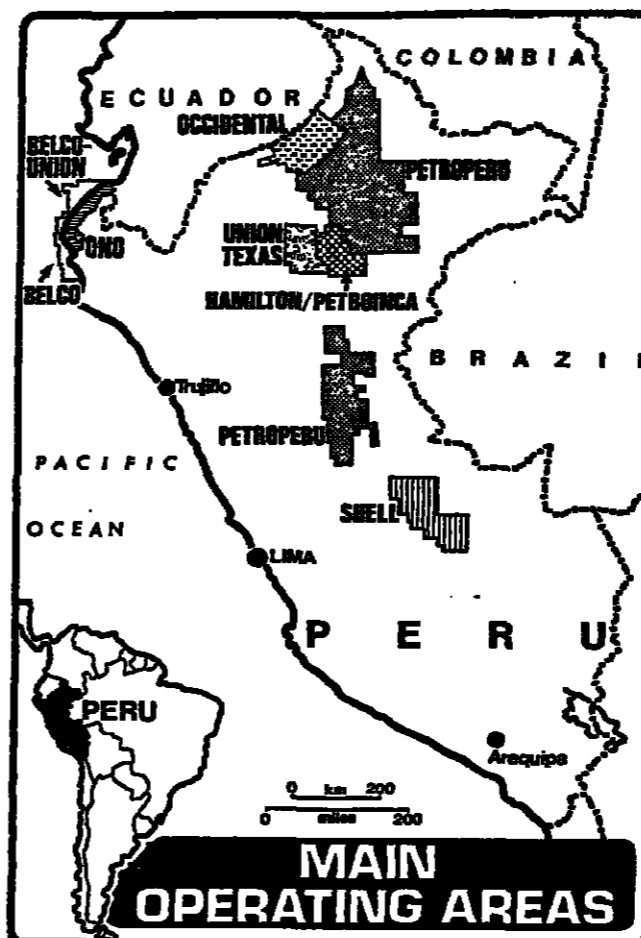
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RESOURCES REVIEW

Hopes and fears of Peru's oil industry

By Robert Graham, recently in Peru



THE PERUVIAN oil industry was given a big boost by last November's exploration contract signed by Royal Dutch Shell with Petroperu. It promises to check the declining investment trend by foreign oil companies and offers new hope of improving the country's reserves. Recoverable reserves have fallen by more than 15 per cent in the past three years to 690m barrels while production is being sustained around 180,000 b/d, but existing fields are running low and without new discoveries Peru will be a net importer of crude within 10 years.

The Shell contract covers two new blocks, nos 49 and 51, in the Madre de Dios basin in the southern jungle on the eastern side of the Andes. These blocks are near to two other jungle blocks on which Shell began exploration in

1863, at Zorritos. Although Peru has been producing for more than 100 years, the modern industry really dates from 1969 when the populist military government abandoned the concession system and established Petroperu as a state-run oil company with responsibility for all aspects of the industry. Petroperu rapidly expanded prospecting either alone or with foreign partners via operating contracts.

The principal new discoveries were made by Petroperu and Occidental in the northern jungle, which now produces two thirds of all Peru's crude. This jungle crude is heavy with a high sulphur content.

The jungle crude is heavy with high sulphur content

By the late 1970s the areas initially thought most promising had been explored and the high hopes raised by the early finds were not sustained. The fields proved generally small by international standards and expensive to drill and exploit. The main amazon jungle fields are almost 900 kms inland on the eastern side of the Andes, and wells in this terrain can cost up to \$25m each. From a high of 46 wells in 1975, the current level of exploration is below 15, and three years ago activity was almost at a standstill.

Majors like BP pulled out (from block 13) after poor results and the smaller U.S. independents which were willing to develop smaller fields became concerned by the changes made in the contracts. The "Peruvian" model contracts signed in the 1970s were generous to the contractor, giving an average 50 per cent of the production. No income taxes were paid on this share, only expenses deducted. Since costs were usually around 30 per cent of this share the contractor ended up with a 37 per cent profit on the total oil produced. In 1979 the government altered this system radically. The contractor rather than Petroperu became liable for income tax on profits and as a result the contractor's share of the crude produced became equivalent to 12 per cent after deducting costs. Such a take compares with 15 per cent in Indonesia, 19 per cent in Brazil and 39 per cent in Colombia.

To offset the negative effect of this legislation an additional law was passed in 1980 that provided a system of tax credits for new investments. Significantly a differential in these

tax breaks has been made between the northern and southern areas—in the former contractors are treated less favourably. Occidental, which has been involved in a lengthy tax dispute with the government, has been pressing for a change in the whole contractual basis. Negotiating for Block 29 in the Hualaga basin in the middle of the eastern slopes of the Andes, Occidental has proposed a fee per barrel produced based on a basket of international crudes; and instead of paying taxes in crude they would be paid in cash. The outgoing government of President Fernando Belaunde is unlikely to take a decision on this now. It was as much as could be done to elaborate the deal with Shell.

Shell has signed a 30-year risk contract which commits the company to spending \$20m in

the first three years. This will include geological studies and shooting of 400 kms of seismic lines. If Shell moves into the next three-year phase of exploration it would have to spend a further \$20m and drill at least two wells. Against these commitments, bank guarantees of \$49m have been signed. In contrast to previous jungle contracts (including its own signed in 1981) which obliged companies to drill two wells within the first two years, Shell has obtained a seismic option. This means that the bank guarantee is not lost if seismic surveys do not justify drilling.

Shell needs to prove at least 400m barrels of oil to justify construction of a trans-Andean pipeline from the jungle to the southern coast at an estimated cost of \$1.4bn. In the contract one of three formulas can be used for working out the production split

depending on how the pipeline is financed. If Shell holds the pipeline it starts with 67 per cent of production; on a joint venture Shell would start with 57 per cent on the first 80,000 b/d and if Petroperu undertook the pipe alone, Shell would receive half the crude up to 120,000 b/d.

If Peru is to have a reasonable chance of increasing its reserves then other companies must follow Shell. Sr Fernando Zuniga, head of Petroperu, has been lobbying foreign companies to take either a first look or renew their interest even before the Shell deal was tied up. Sr Zuniga has also been behind a study proposing a new model of contract which provided a better take for the operator, because he is aware that Petroperu alone cannot fund the necessary investment.

According to Sr Zuniga, Marathon, Conoco, Union of California, Mobil and Texaco are sharing interest in Peru and have bought a lot of information from Petroperu. But at least some of these companies are still nervous about the political climate in Peru, especially concerning operations in those areas in central and southern Peru where the Maoist guerrilla organisation, Sendero Luminoso (Shining Path) is active. Others want to see the tax dispute between the Government and

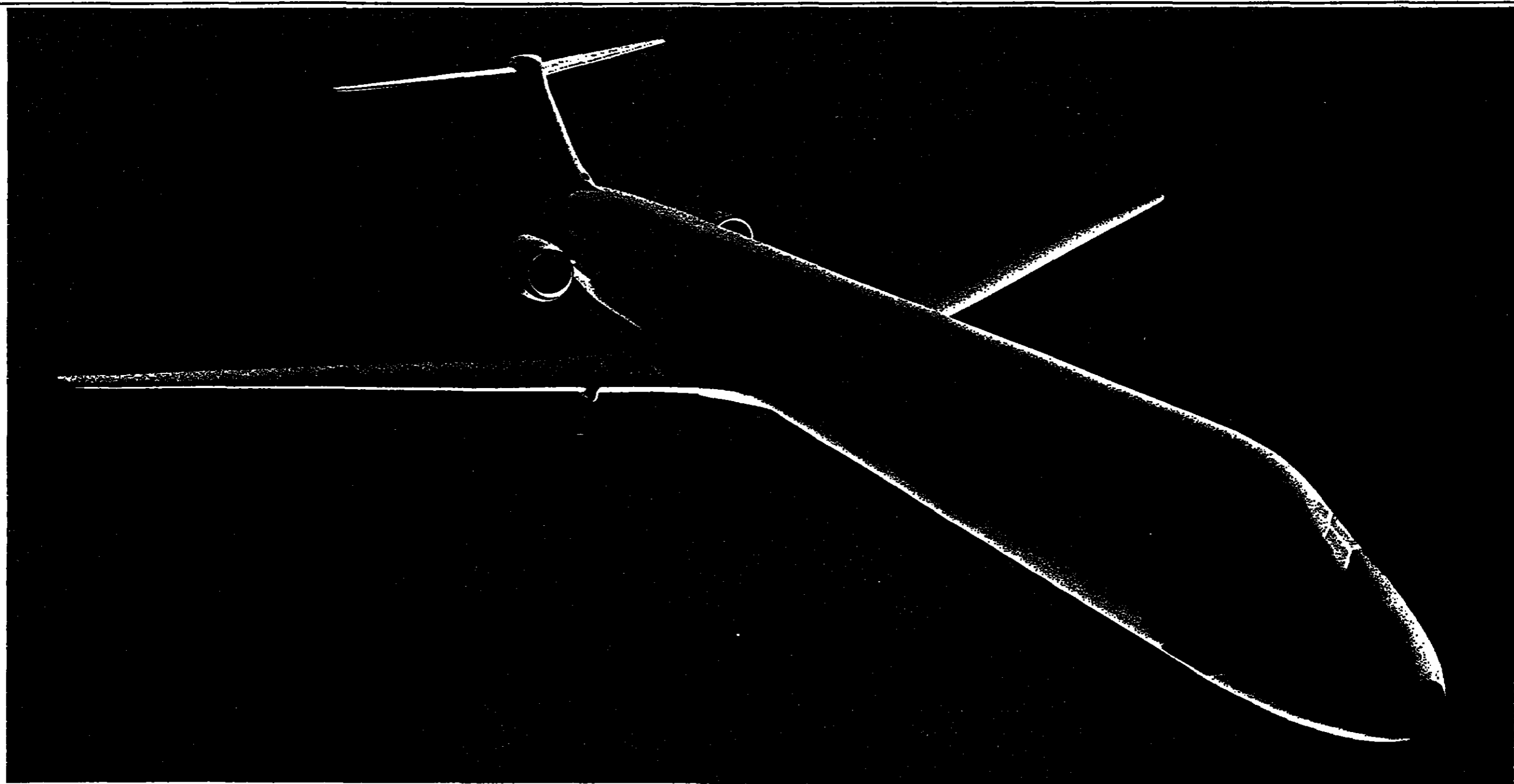
No one is sure when the country will become a net importer

Occidental and Belco over allowances and overpayment of advances: settled before they make a move. Occidental has invested more than \$1bn in recent years in the country but is withholding further commitments until the tax issue is settled.

In the meantime, Petroperu's project to revive the Laguna Zapotal fields in the Talara region on the northern coast is about to get ahead. The project has been bedevilled by problems and is already over 18 months behind schedule. Experts in Petroperu say that this \$240m project could provide an extra 14,000 b/d, preventing an overall decline in the country's production during the next two to three years.

But even with this project operational, Sr Zuniga says that production could be as low as 110,000 b/d by 1990 without new discoveries. Against this domestic demand is currently running at 120,000 b/d. No one is sure when Peru will become a net importer, but the rate of depletion is such that the pessimists believe it could be well within the next decade. Peruvian crude is being sold mostly on the spot market at a price last year averaging \$26.90 per barrel. Up to October earnings totalled \$536m, 20 per cent of Peru's hard currency revenues.

The next likely agreement is with Maritime Petroleum in the



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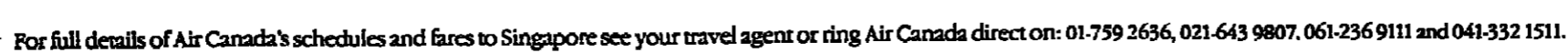
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TECHNOLOGY

EDITED BY ALAN CANE

CAN UK BAKERS MAKE AMERICAN LOAVES? IT DEPENDS ON HOW THEY KNEAD THE DOUGH.

Enlightened approach to British bread

BY PETER MARSH

A MAKER of baking machinery in Lancashire is attempting to win the "battle of the bubbles"—to perfect hardware that will double the number of air-filled cells in a loaf of standard weight.

The prize at stake is a share of a large market in supplying baking equipment to bread manufacturers in the U.S. where, traditionally, consumers prefer bread of perhaps half the density of the typical British loaf.

Few U.S. bakers make bread with the comparatively modern "no-time" technique favoured in Britain. In this, the time for conventional fermentation of dough is greatly reduced, so cutting costs. Instead, most American bread companies favour traditional techniques in which the dough is left to ferment for up to four hours.

Efforts to establish the British no-time technique in the U.S. have failed in the past, largely because of the difficulties of adapting the process to make American-style bread.

But Tweedy of Burnley, a pioneer in making equipment for the no-time technique used in Britain, is cautiously optimistic that, after years of effort, it has cracked the prob-

lem. The company thinks it has devised a way to mix dough that can later be baked to give low-density loaves.

Tweedy has changed in a minor but important fashion the mixing action of the hardware that it makes for British bread plants. It has worked with British Arkady of Manchester, a manufacturer of baking chemicals, to produce a special formulation of additives needed to make the "no-time" type bread acceptable to the U.S. consumer.

Both Tweedy and British Arkady are owned by Archer Daniels Midland, an American food and agriculture company

based in Decatur, Illinois.

In the past year, Tweedy has supplied 10 adapted dough-mixing machines to half a dozen bread plants in the U.S. The hardware is turning out dough on production lines while engineers evaluate the results. Each \$80,000 machine mixes up to 350 kg of ingredients—typically wheat flour, water, yeast and chemical additives.

Tweedy is reluctant to give details of its process before evaluation trials are complete. Mr Michael Ball, Tweedy's general manager, does not want to divulge the plants in which his adapted machines are located.

He says that if the trials prove that the adapted British process can turn out acceptable American loaves at low cost, the U.S. market for machines of this sort could be very large.

Tweedy currently sells about 100 dough-mixing machines a year worth some \$7m. Nearly half the machines are exported—but mostly to countries such as New Zealand, Brazil, Israel and South Africa where people happen to like the British form of bread.

The British no-time method is called the Chorleywood process, to commemorate the inventors of the technique—scientists at the Flour Milling and Baking Research Association in Chorleywood, Hertfordshire. About 90 per cent of UK factory-made bread is produced with the technique, which was devised in the late 1950s (see panel).

In the U.S., only about 10 per cent of mass-produced bread is made with no-time techniques. Each year Americans munch their way through bakery products worth \$30bn—more than the gross domestic product of Portugal—including roughly 7bn loaves.

Typically, an American loaf of 500 grams would take up about 3.5 litres, up to twice the volume of the UK equivalent. In simple terms, a U.S. loaf contains twice as much air, which is trapped in the cells enclosed by the fibres of protein that form the structure of the loaf.

Crucially, U.S. bread makers would not want extra air, simply in the form of large bubbles. This would lead to a loaf with too open a structure—in a form approaching French bread—that would not appeal to the average American consumer.

The technical challenge thus adds up to a requirement to produce dough with a very fine bubble structure—in which a lot of air cells are packed into a small space.

Tweedy's engineers found they could produce such dough by making subtle changes to their mixing machinery. To make British bread by the Chorleywood process, the ingredients are churned up in a mixer whose moving parts turn at about 330 revs/min for two-and-a-half minutes.

In a machine adapted for the U.S., the mixer turns at 305 revs/min for slightly longer—4 minutes. In this way, more energy is put into the dough to create the finer bubble structure.

The reduced running speed ensures that the dough does not become too hot. If the temperature during the mixing process rises much above about 30 deg C, the dough becomes too sticky. It is then difficult to handle during later stages of the bread-making process such as moulding and baking in ovens.

The U.S.-style Tweedy mixers have cooling jackets in which water circulates to keep down the temperature. Engineers have also changed the shape of the mechanical components

THE "NO-TIME" bread-making technique favoured in the UK—called the Chorleywood process—has virtually replaced traditional techniques in British bread factories.

The Chorleywood process influences the key, initial stage of bread making in which dough is mixed. In traditional methods, ingredients such as wheat flour, water and yeast are stirred together.

The most important element of the wheat flour is gluten, the collective name for a group of proteins which form a plastic structure when mixed with water. It is the gluten that forms the walls of the air cells that feature in bread.

The Chorleywood process differs from conventional techniques in two important ways. It involves a highly intensive mixing stage, during which a large amount of energy is imparted to the dough in a short time.

Secondly, the process requires a high level of oxidising chemicals. These accelerate the reactions that take place during the lengthy bulk fermentation of conventional processes.

Little "development" of the dough takes place. This is the name for the changes in the structure of the gluten chains as they are reoriented during the gentle mixing of conventional bread-making processes. During development, the chains become linked in networks that form the cellular framework of the loaf. Scientists do not fully understand the physical and chemical changes that take place.

In the Chorleywood technique, chemical reactions due to the added oxidisers replace the conventional development. The oxidisers, ascorbic

acid for instance, cause cross-linking of gluten strands to produce the same kind of cellular structure.

Bakers can vary the way the gluten fibres link by changing the type and concentration of the oxidiser chemicals. Other additives include emulsifiers such as glyceryl monostearate that strengthen the walls of the air cells.

Bakers can also add extra quantities of gluten to increase the amount of protein in the mixture. Before the advent of the Chorleywood process, British bakers had to import large quantities of high-protein Canadian flour to make suitable bread.

Tweedy of Burnley, which in the 1950s was a broadly based engineering company (among other things it made ships' portholes), became involved with bread-making as a result of one fortuitous incident. The Flour Milling Baking Research Association in Chorleywood bought one of the company's granulators (normally used to break down sugar lumps) during the early stages of developing the process. The association used the granulator to mix dough.

WORKS OF literature may lose something in the course of translation to another language; computer software can lose its meaning entirely. So when Thorn EMI Computer Software became the exclusive world-wide publisher for a suite of programs developed by a U.S. company, it took on board a raft of tricky problems.

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According to David Gearing, managing director of Thorn EMI Software, the Perfect products offered genuine ease of use for the first time user, coupled with extensive but highly regarded documentation, including examples—U.S. examples.

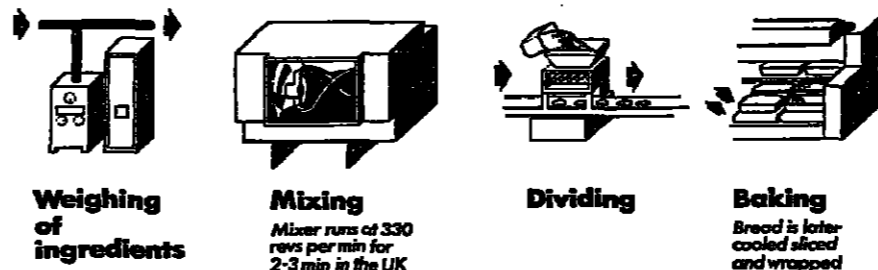
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The company had to dig deep into the machine code (lists of zeros and ones representing electrical impulses which the computer recognises as instructions) to change the character sets for each country without disturbing the functions of the program.

Then it had to rewrite all the business examples—payroll and personnel taxation was particularly important.

The programs are squeezed into 128,000 bytes of memory and sell in the UK for £149 or ¥420. In continental Europe prices are higher reflecting local market conditions and the costs incurred in the translation—the West German, the same package sells for about £250.

MAIN STAGES IN COMMERCIAL BREAD MAKING



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Program

The pain of perfect translation

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Software

Personnel system

CAP, THE UK information systems market has set up a joint venture to market a computer-based personnel system. The software, developed by Percom, provided management information for recruitment and selection, career development and Statutory Sick Pay. The system is suitable for companies with more than 150 employees. Software can run on a variety of micro-computers including the IBM personal computer. More details from Percom CAP on 0625 594885.

Networks

American connection

TORUS, the office automation company partly owned by Acorn Computers, is setting up a subsidiary in the U.S. The company has developed a network system for the IBM personal computer range and wishes to attack the \$450m U.S. market. The network calls the IBM a graphics controlled local area network which is designed to be particularly easy to use.

Peripherals

Computer printer

OLIVETTI's multi-mode dot matrix printer is now available in the UK for personal computer and word processor applications. The machine offers a choice of printing quality up to letter standard at three different printing speeds. It can be interfaced to personal computers such as the IBM, DEC, ACT as well as Olivetti's own make though the printer can also be linked to larger systems. More details from the company in London on 01-735 0686.

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UK NEWS

Retailers
lose some
confidence
in outlook

By David Churchill

BRITAIN'S retailers are becoming slightly less confident about the outlook for consumer retail spending, although the level of trade still remains much higher than a year ago, according to the latest Financial Times/Confederation of British Industry distributive trade survey.

Some 60 per cent of the 334 retailers in the December survey expect sales volume in January to be higher than a year ago, while 11 per cent expect it to fall. That gives a percentage balance of plus 49 per cent, the lowest level of expectation for any month in 1984.

In December, some 74 per cent of retailers experienced a rise in sales volume with only 14 per cent reporting a fall, giving a balance of plus 60 per cent (in comparison with an expected balance of plus 56 per cent).

Confectionery, tobacco and newspaper retailers were the only sector to report a fall in sales volume during December. That group is also the most pessimistic about the outlook for January.

Mr John Salisse, chairman of the survey panel, said yesterday: "Retailers expect business for January to be well up on a year ago, although trade is now growing at a slower rate than in the last few months."

Mr Salisse also pointed out that "small shops reported better sales growth than the large multiples, perhaps because of the late Christmas rush."

The survey is based on replies from 577 companies, of which 334 are retailers, 186 wholesalers and 57 from the motor trade.

Out of the whole survey, some 48 per cent expect the volume of sales to rise in January with 10 per cent expecting a fall, thus giving a balance of plus 38 per cent. In December, 52 per cent of companies in the total survey reported that sales volume had risen, while 21 per cent recorded a drop, thus giving a balance of plus 31 per cent (against an expected balance of plus 22 per cent).

Wholesalers in January are feeling more optimistic than for some months, with 45 per cent expecting sales to increase and only 7 per cent expecting a drop, thus giving a balance of plus 38 per cent. In the last two months, the expectations of that group have been more muted.

Nissan sets high
pay rates at
new car plant

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

NISSAN, the Japanese motor company, intends to pay employees at its UK assembly plant well above the going rate in the rest of the British motor industry.

It says the basic pay of the 25 foremen it wants to recruit for its factory at Washington in North-east England will be about £12,500 a year, "to ensure we get the right people."

The equivalent pay at Ford UK plants for production foremen is between £9,000 and £13,000 for a 40-hour week but only a very few, senior people receive the top rate. Basic pay can be boosted by night shift work.

Austin Rover, the BL subsidiary, pay its foremen - whom it calls supervisors - up to £10,500 a year basic, plus a maximum bonus of £1,500.

Nissan has already filled most of the senior production management appointments by offering salaries about one third higher than the norm in the UK industry.

Mr Peter Wickens, director of personnel and one of the first to be recruited, said yesterday: "To build

the highest quality car in Britain we need the highest quality supervision and we are prepared to pay to get the right people."

Like Austin Rover, Nissan will not call the staff foremen but instead supervisors. The employees will be recruited in the spring and will have between six and 10 weeks' training in Japan in two stages. The supervisors will also be involved in setting up the Nissan assembly plant in Britain, due to be on stream next year, and training other employees.

Mr Wickens said that for some positions car manufacturing experience would be essential, but he also wished to recruit a large percentage with relevant manufacturing experience (for example in light engineering) in the North-east. A comprehensive selection process would include interview, testing and group exercises.

Mr Wickens said: "We need people who can work in a high-technology environment and who are dedicated to achieving teamwork, the highest levels of quality and who are totally flexible in their attitude and approach to the job."

Quarter of UK tanker
tonnage laid up

BY LYNTON McLAIN

ALMOST a quarter of the UK tanker fleet by tonnage is laid up for lack of work, compared with 17 per cent of world oil tanker tonnage laid up, the General Council of British Shipping says in a report on world shipping.

Japan has 2 per cent of its tanker fleet and only 1 per cent of its total merchant fleet laid up. The Netherlands has the highest proportion of its oil tankers laid up, with almost half, 42 per cent, idle.

The Netherlands has only 1 per cent of its dry cargo vessels by tonnage laid up, compared with 3 per cent in the UK. Japan has no dry cargo ships idle.

Greece, the world's leading shipping nation with a total of 481 dry

cargo and tanker vessels has 19 per cent of its fleet idle. This compares with 16 per cent of the total UK fleet and 1 per cent of the total Japanese fleet.

World merchant shipping tonnage laid-up for lack of work fell 2.63m tons deadweight in November to 65.67m dwt.

● The Liverpool Freeport, officially opened at the end of November, has received its first cargo of containers from Liverpool-based Kirby (Tyres), which distributes worldwide.

The containers, with 18,000 inner tubes from Korea, were handled by dockers employed by the Mersey Docks and Harbour Company and stored with Freeport Warehousing

Lawson urged to focus on tax cuts

BY MAX WILKINSON, ECONOMICS CORRESPONDENT

MR NIGEL LAWSON, the Chancellor of the Exchequer, was urged by company directors yesterday to concentrate his budget on tax cuts with renewed efforts to curb public spending.

In its budget submission, the Institute of Directors also suggested that he should raise his borrowing target for 1985-86 from the £7bn assumed in his Autumn Statement to £8bn.

By increasing this borrowing target, the institute believes the Chancellor would be able to make room for £2.5bn of tax cuts on conservative estimates rather than the £1.5bn suggested by Mr Lawson in November.

Sir John Hoskyns, director general, said yesterday that he did not believe that the recent fall in sterling would have reduced the Chancellor's scope for tax cuts, and he

believed cutting taxes would be one of the quickest ways of reducing unemployment.

The main proposals of the institute (with the cost in a full year) are:

- A percentage point reduction in the basic rate of income tax (£1.2bn).
- A 5 per cent cut in higher rates of income tax (£475m).
- An increase of personal allowances and higher rate tax thresholds by 4 percentage points more than the inflation rate (£800m).
- Abolition of capital transfer tax (£880m).
- Abolition of capital gains tax (£1bn).
- Increase of VAT threshold for small businesses from £18,700 a year to £50,000 per year (£150m).

The institute urges the Chancellor not to try to raise revenue for di-

rect tax cuts by increasing the coverage of VAT or attacking the tax reliefs on mortgage interest payments and pension contributions.

It also urges the Chancellor to institute four major reforms aimed at curbing public expenditure. These are:

- A system of "zero based" budgeting. This would in theory mean that departments would wipe the slate clean from time to time to consider from first principles what they should be spending their money on. Under the present system they more or less continue doing what they were doing last year with some changes at the margin.

Across the board cuts to departmental budgets.

A special Treasury minister, with officials, to curb spending.

A system which gave personal incentives to departmental civil servants to make economies.

Sir John said yesterday: "A key thrust of the budget submission is that the Government must reject the idea that it can spend its way out of trouble. The aim of policy should be to reduce Government spending and taxation to below the levels when the Government took office in 1979."

The institute would like the Government to encourage wider share ownership by allowing people to invest up to 15 per cent of their income in UK companies without paying income tax.

It would also like the Government to move toward the abolition of direct and indirect subsidies, such as child benefit, and replace them with tax reliefs.

Government fiscal plans insult
to the unemployed, says Heath

BY MARGARET VAN HATTEM, POLITICAL CORRESPONDENT

GOVERNMENT plans to cut income tax in the next budget are an insult to the unemployed, Mr Edward Heath, a former Prime Minister, told Conservative Party supporters in the north-east of England, one of the UK areas worst hit by lack of jobs.

His all-out attack on the Government's economic policies was timed to cause maximum embarrassment ahead of yesterday's House of Commons debate on unemployment and public investment.

Mr Heath told the Sunderland Conservative Association that public spending on infrastructure was badly needed, and should have priority over any tax cuts.

The tax cuts planned by the Government would boost consumption only among those already working, mainly of imported goods, while the impact on employment would be indirect and negligible.

"The proposal to reduce income tax rather than to increase public investment as an inducement to the unemployed to work is, in my view, an insult to the unemployed," he said. It simply ignores them. To suggest that people need incentives to increase their willingness to seek work seems to me to be out of touch with reality."

There were those, he said who argued against public spending on capital projects with accusations of

BRITAIN must become a full member of the European monetary system and lead a concerted effort to counter the dominance of the world economy by the U.S., Mr Edward Heath said in the House of Commons last night.

He renewed his attack on the Government's economic policy and cited the difficulties of sterling as another example of over-reliance on market forces. His speech was greeted with cheers from opposition benches and muted protests from fellow Tory MPs.

"throwing away money at problems" and trying to spend their way out of recession.

"We can no longer accept such slogans as substitutes for an intellectual justification of economic policy," he said. "Expenditure on the basis of a full and careful examination of needs and priorities cannot be said to be throwing away money."

If we borrow more of our own people's savings in order to invest in our nation's future, who should condemn us?"

The real problem was the large outflow of British savings to earn high interest in the U.S. - which was denying Britain the investment needed to revitalise industry. More-

over, that was boosting the dollar and weakening the pound, as was evident from the Government's desperate attempt to prevent more capital from leaving the UK by raising interest rates.

It was time the EEC acted to isolate itself from damaging high U.S. interest rates, he said.

"The finance ministers visiting Washington this week will come away empty handed. That makes it all the more important that, nationally and in the European Community, we pursue strategies that are not at the mercy of the high interest rates in the U.S. economy," he said.

Britain needed the money flowing to the U.S. to create jobs by rebuilding old industries and creating new ones, but especially by rebuilding the existing ones.

"Industries cannot be created overnight," he said. "That is why it is such a tragedy that so much of our economic base was destroyed in 1981-82 by allowing the pound to reach such high levels."

Mr Heath dismissed as a "monetarist myth" the Government's claim that to boost public borrowing in order to fund capital projects was to print money, building up debts for future generations.

The decline in the British economy was bearing far more heavily on the north of the country than on the south.

Sealink plans
multi-million
£ investment

By Our Industrial Staff

SEALINK, the recently privatised cross-Channel ferry operator, has disclosed plans for heavy investment in new ships and port facilities. The plans include a programme of voluntary redundancies and decentralisation of staff functions.

The National Union of Seamen yesterday described the proposals as "a declaration of war" that would lengthen unemployment queues. Sealink was sold to Sea Containers by British Rail in July last year.

The largest part of the planned new investment, described by the company as running into "hundreds of millions," will develop Harwich as a commercial port intended to rival Felixstowe, higher up the east coast of England.

Sealink is also commissioning two new flagships to operate the Dover-Calais route, at a cost estimated at £20m each.

When the ships are introduced in two to three years time, the two ships at present running the Dover ferry route will be moved to Folkestone.

Other ship investments include a £2m high-speed catamaran ordered from Sweden to operate between Portsmouth and the Isle of Wight. By 1988, three new car ferry routes are to be started up in the Mediterranean, linking Venice, Piraeus and Istanbul.

Britain
braced for
U.S. tourist
invasion

By Arthur Sandles

BRITISH holidaymakers seeking a quiet rural retreat in their own country this year may find they have been supplanted by dollar-rich Americans. Well over 3m Americans are expected to holiday in the UK this year and with London putting up the house full notices many of them will turn to rural Britain.

"All America seems to be coming to Britain," said the British Tourist Authority (BTA) yesterday as it launched its latest issue of a booklet which tells overseas visitors about the nation's smaller country hotels and restaurants.

The most recent problems for sterling have come just at the time when Americans and Europeans are making their 1985 holiday plans and a surge of bookings. The £80-£100 a night that is charged for double rooms at such luxury retreats as Chewton Glen in the New Forest, or the Bear at Woodstock, near Oxford is now relatively cheap in dollar terms.

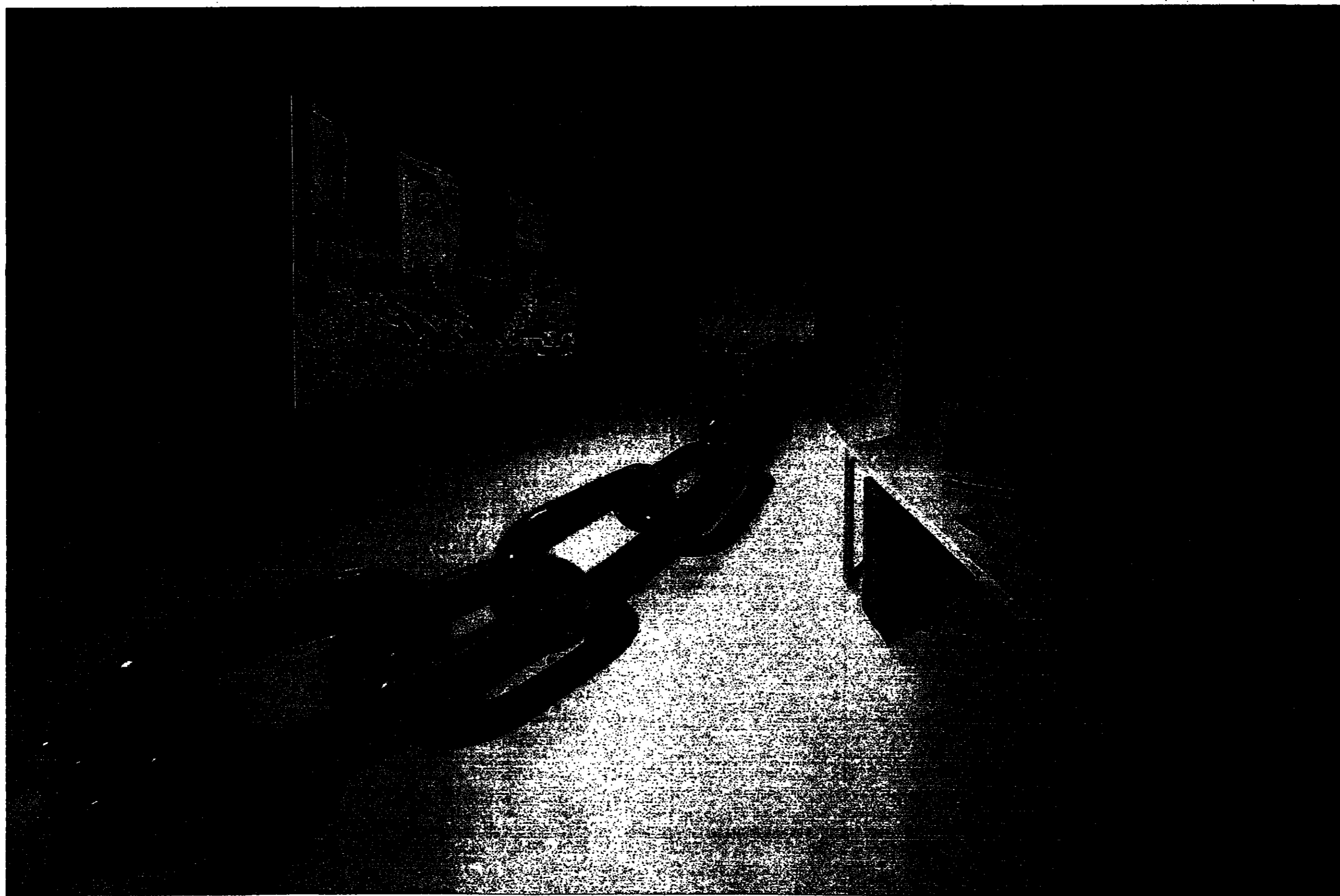
The new booklet, BTA Compendium Country Hotels, Guest Houses and Restaurants, covers not only these idyllic retreats, but also small guest houses charging less than £30 for a double room, and some less than £20.

Establishments in the listings have been vetted by an independent committee and display the BTA plaque for distinctive service within their price range. More than 330 properties are listed. "It is becoming the bible for the independent American traveller," says the BTA.

Researchers say that visitors may get a pleasant culinary surprise. "Britain's indifferent image for food is a thing of the past," says Mr Duncan Black, chairman of the BTA. "There has been a considerable improvement over the past few years."

● Christie's and Sotheby's, the London auctioneers, report that the decline in the value of the pound has led to a large increase in the number of American buyers.

Leading stores have also reported a big rise in overseas customers, especially from the U.S., during the January sales. London estate agents say that foreign buyers have helped to push the capital's house market to its strongest level yet.



Britain
raced for
.S. tour
vasion

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someone must explain
to your staff what an axle is.

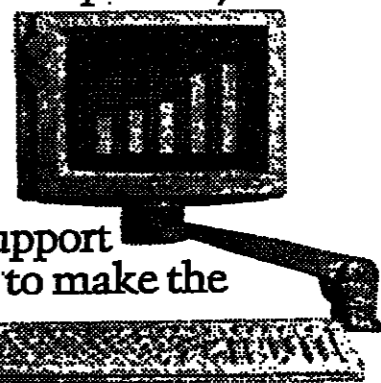
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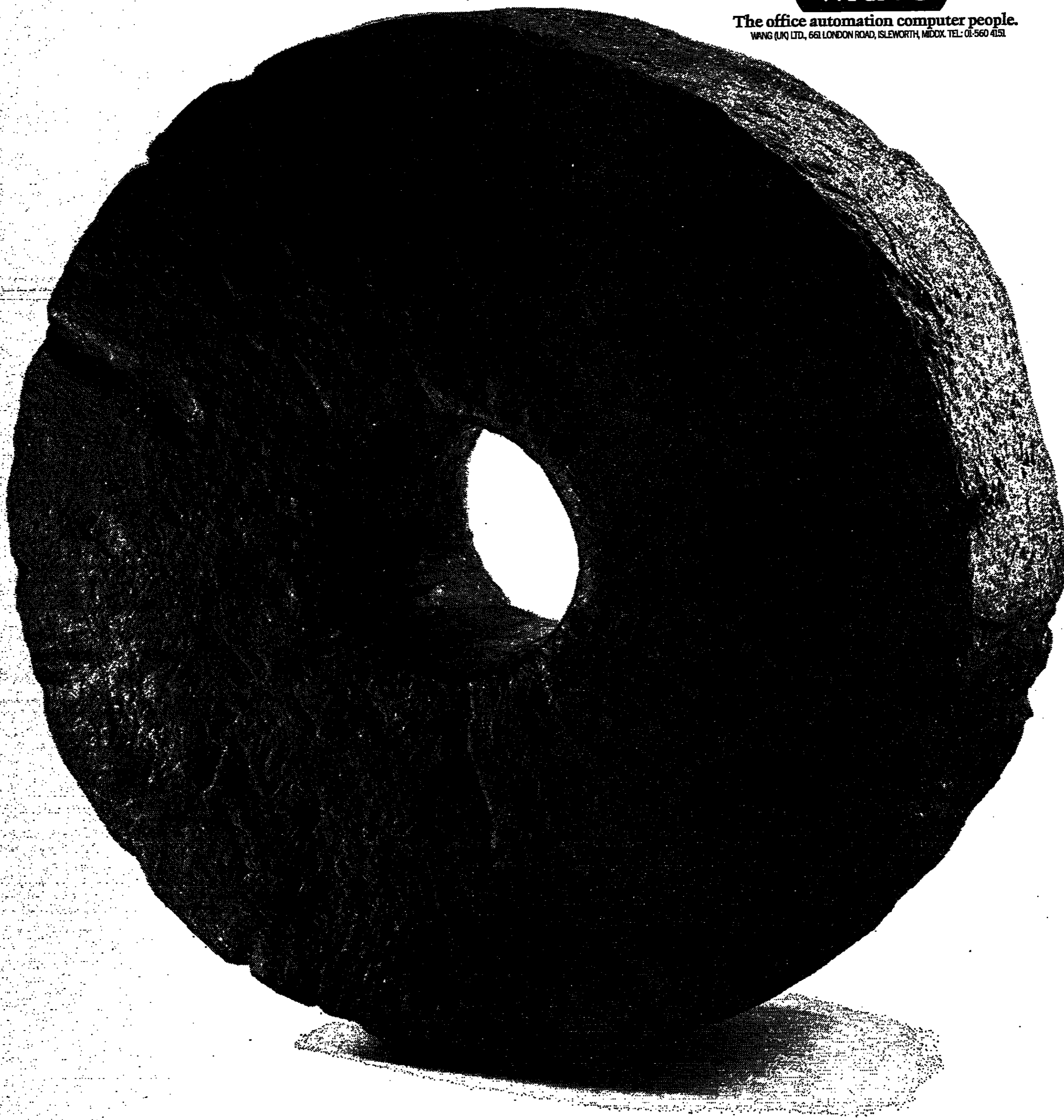
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THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

Craftsmen

Benefits of breaking the boundaries

BY BRIAN GROOM

MAINTENANCE CRAFTSMEN are playing an increasingly crucial role in the future of British industry. Slowly and patchily, management is beginning to realise the importance of retaining and motivating them, broadening their skills and reorganising their work.

This small group of workers—5.3 per cent of the chemicals workforce, for instance, and 3.9 per cent in food—is vital to ensure uninterrupted production as micro-electronics is introduced to process control. Breakdowns on a line which, say, fills 450 bottles of sauce a minute are costly.

Among those responding to change, Mobil Oil is abolishing craft demarcations at its Coryton refinery in Essex. Tides like boiler-makers, electricians, pipe-fitters and welders are gone, and each man (they usually are men) is free to do any task which he is skilled enough to do safely.

Elsewhere the maintenance/production divide is being crossed. Esso Chemicals, on its new site at Mossburn, Scotland, is combining production tasks and 10 craft trades into a single class of worker who does both maintenance and process work.

Flexibility is increasing at plants like Rothmans' cigarette factory in Carrickfergus, Northern Ireland. Skilled fitters and electricians will, if necessary, do unfamiliar things like load reels on to machines or sweep floors, while machine operators are free to identify and rectify problems.

By no means all managements are adapting well to new technology, however. The London-based Technical Change Centre, established in 1981 with backing from the Leverhulme Trust, the Science and Engineering Research Council and the Social Science Research Council, has identified widespread inadequacies in process industries' use of maintenance staff, resulting in costly downtime.

The centre's latest attempt to

help change this situation is a study of food processing, Britain's largest process industry, which employs nearly 500,000 people and accounts for 10 per cent of Gross Domestic Product.

The food industry is rapidly adopting new technology after a slow start. Paul Mitchell and Michael Cross, the authors, say the 41 per cent of establishments in their study which have introduced micro-processor-based control equipment are coping, but need to develop new manpower and training strategies.

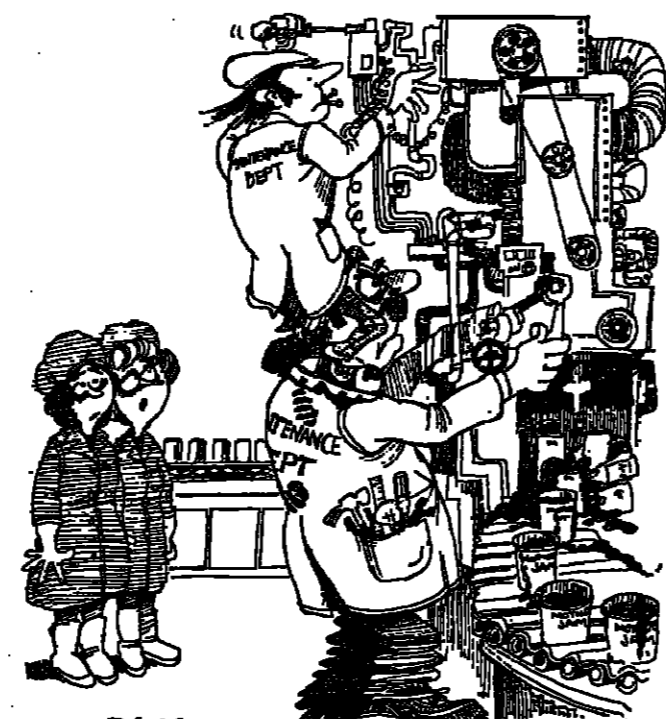
Fifty-three per cent of companies said they would like to reorganise their maintenance workforce, and half of these proposals were already under discussion. The key aim was to achieve better fault-finding on complex equipment and carry out repairs more rapidly.

Mitchell and Cross see a growing need for multi-skilled craftsmen who can work on new machinery which combines mechanical, electrical and pneumatic elements. At present delays are occurring while different craftsmen decide in whose trade the fault lies.

These broader skills must, say companies, be accompanied by deeper knowledge of how they apply to specific equipment otherwise the jack-of-all trades becomes master of none. There is already some wariness in industry of multi-skilling, and a fear that it could dilute expertise.

Engineering craftsmen are traditionally grouped into "electrical," "mechanical" or "instrument" trades, and within these are trained in a particular discipline such as fitting. Companies in the Mitchell and Cross study identify a need for five new craft occupations:

● **Craft technicians.** The most notable development, these are craftsmen (mainly electricians) who have received training in a range of skills like electronics, pneumatics, hydraulics and diagnostics needed to pin-



"Now that's what I call flexibility—they're both cross-trained craftsmen"

point faults on microprocessor-controlled plant.

● **System-specialist craftsmen.** These have an understanding of the relationship between machines and the production process, and are needed because of the increased integration of plant and use of central control systems.

● **Machine-specialist craftsmen.** These would be equipped with the knowledge and skills applicable to a specific type of machinery.

● **Dual-trained craftsmen.** These have acquired through formal or informal training a skill in a second trade, for example, a mechanical fitter undertaking electrical work.

● **Cross-trained craftsmen.** These have acquired additional skills within their original trade, such as an electrician undertaking work in electronics, or a fitter doing pneumatics.

As an intermediate response to changing requirements, some companies have organised craftsmen into teams in the hope that they will have the range of skills needed to cope with breakdowns.

In some cases craftsmen are beginning to do work which traditionally belonged to semi-skilled process operators—in one instance, craftsmen were responsible for controlling the plant manually if the automatic control system failed.

Conversely, operators are becoming more responsible for identifying faults and making routine adjustments.

A few companies, mainly

large ones, are using white-collar technicians to ease the maintenance problem. They are deployed as "trouble-shooters" to back up craftsmen.

On all these things there has been more talk than action. As Mitchell and Cross put it: "While the need is often recognised, few companies have successfully introduced new grades of craftsmen." But looking to the longer-term, two further new grades are envisaged:

● **Mechanicians.** Proficient in fault-diagnosis and rectification, these would move with ease across the mechanical, electrical and microelectronic fields.

● **User-maintainers.** In factories where plant was most closely integrated, which had the greatest need to respond to breakdowns, the job of the machine-specialist craftsman would evolve into a combined operating and maintenance job.

Much of the training currently being done is by suppliers of process control equipment. Indeed, it is a major part of the competition between them. One supplier employs 19 full-time lecturers and offers 80 courses.

There has also been some in-company training, but limited in amount. Mitchell and Cross say: "There will be a growing need for training in micro-electronics, diagnostics, cross-trade skills and for specialist training."

Companies are slow in identifying their needs. One training manager said: "Decisions were

taken too late. Despite training plans being laid down prior to installation, the amount of training was minimal. Now the plant is up and running, we are still training, particularly in diagnostics.

Needs vary. Chemical and oil refining companies mostly want to keep two "cores" of mechanical and instrument/electrical jobs, but high-volume manufacturers in brewing, toiletries, pharmaceuticals, food manufacture and tyre-making processing, glass container want to merge them.

It remains uncertain how far multi-skilling, tailored to one employer's particular needs, can go. For the sake of their careers, apprentices still need a "core" of transferable skills which form the basis for a lifetime's employment. But the acquisition of extra skills can mean the difference between being in or out of work.

The Electrical, Electronic, Telecommunication and Plumbing Union has recognised that. Seeing the weakness in employers' training arrangements, it has established its own training programme for members.

It also spots a golden opportunity, because employers are generally selecting electrical craftsmen for multi-skilling. They believe electricians have an aptitude for diagnostics, whereas mechanics cannot easily be trained to learn electrical and electronic work.

The tricky problem facing employers is the way their plans cut across union demarcations, both among craft unions and between craft, general and supervisory unions. Not only are members of general unions the ones most vulnerable to job losses because of automation, they are also worried about being the losers when jobs are merged.

Craft unions can be just as jealous when they feel threatened. One company in the Mitchell and Cross study wanted to upgrade semi-skilled workers to craft status after a period of training, because they had a superior knowledge of the particular machinery, but the craft unions successfully resisted the plan.

Full flexibility is highly contentious, as British Steel discovered when it mooted the "steelworker" concept two years ago. This would require one class of worker to do all the tasks needed in an automated plant, and it drew union protests. Since then the corporation has had to present its ideas more cautiously.

Applying Process Control to Food Processing and its Impact on Maintenance Manpower, from the Publications Officer, Technical Change Centre, 114 Cromwell Road, London, SW7, £5.

Chinese management

Studying at a distance

BRITAIN'S Open University and the China Enterprise Management Association are considering the establishment of a co-operative venture to produce material for the education of Chinese managers through distance learning techniques. The material would be in Mandarin as well as English.

This has emerged during a week-long visit to Britain by a top-level Chinese delegation led by vice-minister Zhang Yan'an of the State Economic Commission. Zhang is directly responsible for the monumental task of training the millions of managers who are needed to implement the New Economic Order, currently being launched in China.

The British visit, which ends today, forms part of a three-week tour of business schools and universities in Europe. It comes at a time when the Chinese are building up several complementary programmes of management education in co-operation with western institutions. Some use the American case study method, while others are based on broader European approaches.

Speaking after his visit to the Open University's Open Business School, and to an interactive videodisc facility in north London, the Chinese

minister said: "We are impressed with the great strides Britain has made in developing distance learning, and hope to co-operate with her in training China's managers using this revolutionary technique." (Distance learning in the UK was examined on this page on January 6.)

Vice-minister Zhang, who is also vice-president of the China Enterprise Management Association (CEMA), considers that it will be impossible to achieve China's ambitious management training objective by conventional "chalk and talk" methods in the tight time span demanded. Hence his examination of new high technology methods could be used to assemble and disseminate high quality information and skills to his vast audience.

The scale of the problem is so daunting and the experience of most Chinese managers in management so limited, that it seems attractive to adopt a high-technology approach in which the few experienced teachers produce course material, while the dissemination is carried out by less experienced tutors as an "in-company" basis.

Hence the idea of using interactive videodiscs coupled with a micro-computer to provide a self-managed learn-

ing programme for individuals or groups. This combines moving pictures with text, and can plot the learners' path through the programme, giving their scores in each section.

The main European involvement in China's fast-developing management education industry has been the European Community's provision of 5m ECU to establish the "Sino-European management programme"—an elitist business school in Peking under the auspices of CEMA, which is itself part of the State Economic Commission.

This position gives it unusual status compared with other western-backed business education programmes in China, which operate under the auspices of the Ministry of Education.

The EC-backed school, under Professor Max Belost, a Briton who formerly taught in France at INSEAD and the Paris Ecole Supérieure de Commerce, is expected to produce over 50 top managers and executives a year. With the establishment of these graduates will help develop teaching materials for the envisaged distance-learning programme.

By a special correspondent

Business courses

New methods for effective management learning: how to build them into your training programme. Uxbridge, February 18-20. Fee: £375. Details from the Secretary, Management Programme, Brunel University, Uxbridge, Middlesex UB8 3PH. Tel: (0895) 56461 Ext 215.

Attracting, retaining and motivating computer professionals. London, February 19. Fee: £50. Details from European Study Conferences, Kirby House, 31 High Street East, Uppingham, Rutland, Leicestershire LE15 9PY. Tel: 0572 822711. Telex: 341352 EURCON G.

FT-City seminar, London, January 28-30. Fee: £500 plus VAT. Details from the Financial Times Conference Organisation, Minster House, Arthur Street, London EC4A 3DF. Tel: 01-621 1355.

London EC4A 3DF. Tel: 01-621 1355.

Kamban Japanese materials management. London, February 7. Fee: £215 plus VAT. Details from B. J. O'Connor International, 10, Aldenholme, Elmwood Road, Weybridge, Surrey KT13 0BR.

Profit management, Bromley, February 10-12. Fee: £650. Details from the Course Secretary, Sundridge Park Management Centre, Bromley, Kent BR1 3TP.

Sales management, Henley-on-Thames, February 17-22. Fee: £830 plus VAT. Details from the Henley Management College, Greenlands, Henley-on-Thames, Oxford RG9 3AU. Tel: (0491) 571 454.

Automated manufacturing, London, February 20-21. Fee: £506. Details from the Financial Times Conference Organisation, Minster House, Arthur Street, London EC4A 3DF. Tel: 01-621 1355.

How effective is your research and development organisation? Uxbridge, February 20. Fee: £155. Details from The Secretary, Management Programme, Brunel University, Uxbridge, Middlesex UB8 3PH. Tel: (0895) 56461 ext 215.

Project management, Slough, February 4-8. Fee: £450 plus VAT. Details from the Course Administrator, Urwick Management Centre, Baylis House, Stoke Poges Lane, Slough, Berks SL1 3PF. Tel: (0753) 34111.

Introduction to corporate analysis, London, March 5-7. Fee: £275 plus VAT. Details from D. C. Gardner and Company, 5-8 Bartholomew Place, London EC1A 7HE. Tel: 01-606 7844.

Key issues in technology transfer and the exploitation of intellectual property, Cambridge, March 6-7. Fee: £325 plus VAT. Details from Cambridge Business Conference, 22 Hills Road, Cambridge CB2 1JP. Tel: (0223) 554978.

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STRONG FINAL QUARTER LIFTS FULL-YEAR EARNINGS

U.S. banks' year-end salvation

BY PAUL TAYLOR IN NEW YORK

CITICORP, the world's largest banking group, and two other big U.S. banking groups, Manufacturers Hanover and Bankers Trust, yesterday reported sharply higher fourth-quarter net earnings.

The substantial fourth-quarter gains - which match similarly impressive results already announced by other U.S. lenders - also helped bolster full-year earnings, rescuing many of the country's major banking groups from an otherwise unfavorable year-on-year comparison.

Citicorp reported that its fourth-quarter net income increased by 30 per cent to \$261m, or \$1.91 a share, from \$201m, or \$1.49, in the 1984 quarter. Full-year net earnings increased by a modest 3 per cent to \$890m, or \$6.45, from \$860m, or \$6.48.

Manufacturers Hanover, the fourth largest U.S. banking group, said its fourth-quarter net earnings increased by 23 per cent to a record \$106.2m, or \$2.14 a share, from \$86.3m, or \$2.13. Full-year net earnings increased by 4.6 per cent to \$352.5m, or \$7.12 a share, from \$337m, or \$6.97. Manufacturers Hanover noted that its 1984 results included the effects of a 35.7 per cent or \$1.2bn increase in primary capital.

Bankers Trust, the 10th largest U.S. banking group, reported a 19 per cent increase in fourth-quarter earnings and a 17 per cent increase for the full year. Fourth-quarter earnings increased to \$61m, or \$2.44 a share, from \$51.8m, or \$2.18, boosting the full-year net figure to

\$306.8m, or \$9.52 a share, from \$261.2m, or \$8.55.

Among other factors, the fourth-quarter earnings gains generally reflect higher trading account profits, partly offset by increases in loan loss provisions to bolster reserves.

Citicorp said its gains were fuelled by particularly strong performance in domestic, corporate and consumer businesses, investment banking and trading, and services for financial institutions worldwide. Offsetting factors included continuing high levels of cross-border loans carried on a cash basis, mainly in Latin America, and expected losses for the year in savings and loan networks

acquired in Florida and Illinois earlier in the year.

Manufacturers Hanover said that, apart from the substantial increase in primary capital, the 1984 earnings reflected higher domestic earnings assets, a 33 per cent increase of \$204m in non-interest revenue and a 45.8 per cent or \$198m increase in the reserve for possible loan losses after absorbing substantially increased charge-offs for the year.

PNC Financial, the Pittsburgh-based banking group and the 27th largest in the U.S. said its fourth-quarter earnings increased to \$42.1m, or \$1.91 a share, from \$30.5m, or \$1.47, in the 1983 period, helping boost full-year net earnings to \$143.2m, or \$6.51 a share, from \$117m, or \$5.66, in 1983.

VW may purchase stake in Seat

By John Davies in Frankfurt

VOLKSWAGEN is considering whether to take a capital stake in Seat, the Spanish state-owned car group, in order to consolidate the two companies' already close co-operation.

Under an agreement signed in 1982, Seat assembles VW's Polo and Passat models, mostly for sale in Spain. Seat also imports and distributes other VW vehicles, while the West German group has been helping Seat to build up its distribution network in Europe.

So far, VW has always reacted cautiously to repeated suggestions made in Spain that it should become financially involved in Seat, perhaps by taking a 51 per cent stake.

The West German company said yesterday that it was now in the process of examining the whole question of a stake in Seat but it was too early to indicate what might be decided.

Seat, which has consistently lost money, has been interested in forging a new partnership since Fiat of Italy gave up its minority stake in 1981.

The Spanish company has been improving its technological and marketing image in recent years, aided lately by the introduction of the new Ronda model with engines developed in co-operation with Porsche.

VW is well satisfied with its co-operation agreement, which has enabled it to build up its position in Spain without pumping in capital. Before the Seat connection, VW had less than 1 per cent of the Spanish car market but now has 5 to 6 per cent.

International Paper in red as closure costs exceed estimate

BY WILLIAM HALL IN NEW YORK

INTERNATIONAL Paper of the U.S., the biggest paper company in the world, lost \$74m in its final quarter following a write-off to cover the closure of some of its west coast timber operations.

The \$183m pre-tax write-off is some \$13m higher than first estimated last month, and the fourth-quarter figures disappointed the stock market. Stripping out the write-off and adjusting for a \$17.5m tax credit in the corresponding period of 1983, International Paper's

fourth-quarter net income fell by around 14 per cent to \$44m or 75 cents a share.

For the full year, International Paper's earnings fell to \$120m, or \$1.88 a share compared with \$254.9m, or \$4.61 a share. The group's 1983 results were boosted by a \$123.7m pre-tax gain on land and timber sales, and if the 1984 write-off is excluded, the company earned \$238m or \$4.24 a share. Sales in the latest quarter were unchanged at \$1.1bn and for the full

year rose from \$4.4bn to \$4.7bn.

Mr John Georges, International Paper's chief executive, said: "operating profits in our paper and packaging business segments improved by 300 per cent in 1984. The persistent strength of the dollar and a slowing domestic economy at year end, however, put pressure on our fourth-quarter operating results."

The group expected this situation to continue into early 1985 but was encouraged by the outlook for the full year, he added.

Maxwell sells stake in Express group

BY SUE CAMERON IN LONDON

PERGAMON Press, the UK publishing group, has sold its 15.78 per cent stake in Fleet Holdings - owner of the Daily Express and Sunday Express and of the Daily Star - to United Newspapers for £30.6m (\$34m).

The surprise deal brings United's total interest in Fleet to 18.25 per cent. Yesterday's announcement immediately brought speculation that United would launch an all-out takeover bid for Fleet in the not too distant future.

The sale could mark important turning points for all three of the parties involved.

For Pergamon's flamboyant Mr Robert Maxwell, publisher of Mirror Group Newspapers, the deal is thought to have brought a profit of over £8m. It also sets the seal on his comparatively new role as a Fleet Street press baron.

Mr Maxwell, who has long wanted to own a national newspaper, originally bought into Fleet with a view to gaining control of its Ex-

press Newspapers subsidiary. After his £113.4m Pergamon Press purchase of the Mirror group last year, however, he has no further need of Fleet.

Mr Maxwell is believed to have approached United some 10 days ago. It is thought he was determined that his stake in Fleet should go to a group of which he approved.

For United the deal promises further expansion and a stake in a profitable group. Fleet's pre-tax profits in the year ending June 1984 were £22.06m on a turnover of £24.5m - double those of the previous year.

United is paying for its purchase with 10.6m new ordinary shares, avoiding the need to borrow from the banks. A total of 7.1m of these are to be sold which will give Mr Maxwell £20.7m in cash plus a 4.65 per cent stake in United.

For Fleet Holdings yesterday's deal means the possibility of a takeover comes one step nearer.

Contel backs Edelman bid for Datapoint

By Andrew Baxter in New York

CONTINENTAL TELECOM, the Atlanta-based telecommunications group which has expanded into information processing services, has emerged as the corporate partner of Mr Asher B. Edelman, the New York investor, in his \$464m bid for Datapoint.

Mr Edelman, whose bid for the computer and office communication products group was rejected, has said he received the backing of a large public company for the bid, but had previously not disclosed its identity.

Contel said yesterday that discussions were continuing with Mr Edelman, but no understanding had been reached.

The connection between Mr Edelman and Contel began last year, when Contel bid for the Sorbus computer operations of Mr Edelman's Management Assistance company. Contel, however, was outbid by Bell Atlantic, the AT&T spin-off.

EAB maintains recovery in fourth quarter

By Our Financial Staff

EUROPEAN American Bancorp, the New York consortium bank, maintained its recovery in the fourth quarter of 1984, with net income of \$151m, compared with a net loss of \$6.69m last time.

Even so, primarily because of the second-quarter setback, the bank shows a loss for the year of \$132.94m, against a profit of \$19.23m for 1983.

Loan loss provisions for the fourth quarter were \$93.35m, and at December 31, non-performing assets totalled \$299.3m, or 5.41 per cent of total loans. In the second quarter, loan loss provisions had reached \$119m.

Continental survival plan put to creditors

BY ANDREW BAXTER IN NEW YORK

CONTINENTAL Airlines, the large U.S. carrier which filed under Chapter 11 of the U.S. bankruptcy code in September 1983, has presented the long-awaited outline of its proposed reorganisation plan to a bankruptcy court judge and creditors.

Continental was hit in the early 1980s by high costs which made it hard for it to compete with newer airlines that had flourished since deregulation in 1978. After cutting its workforce by two thirds immediately after the bankruptcy filing and halving the pay of the remaining staff, the airline has re-emerged as a successful low-cost carrier.

Under the outline proposal, which

the airline hopes will form the basis of a reorganisation plan, Continental would pay in full the debt of more than \$1bn existing at the time of the filing.

Secured debt of \$657.8m would be retired within 10 years, with unsecured debt of \$380.1m paid within 12 to 13 years. The company stressed the proposal would not require the use of additional equity to satisfy creditor claims.

Continental's operations involved an average of 158 daily departures serving 89 cities immediately after the filing. Today, 474 departures serve 89 destinations, while the workforce has risen from 4,500 to 10,000.

GenCorp hit by heavy provisions

By Our Financial Staff

GENCORP, the fifth largest U.S. tyre company formerly known as General Tire & Rubber, was hit by heavy provisions in the year to November 30. Net profit fell from \$65.3m to \$7.21m, or from \$2.62 to 33 cents a share, on sales up at \$2.72bn, from \$2.51bn in the previous year.

The earnings figures were struck after a \$57.3m, or \$2.61 a share charge, which included provisions for costs related to a contract dispute, restructuring, and environmental matters at Aerojet General. In the previous year there was a net gain of some \$23m on unusual items.

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BusinessWeek



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ESSELTE

U.S. \$100,000,000

Revolving Underwriting Euro-Note Facility

Lead Managers

Enskilda Securities
Skandinaviska Enskilda Limited

Merrill Lynch Capital Markets

Hambros Bank Limited

Managing Underwriters

Algemene Bank Nederland N.V.

Christiania Bank og Kreditkasse

Credit Suisse

Hambros Bank Limited

Kredietbank International Group

Midland Bank plc

Mitsubishi Finance International Limited

Post-och Kreditbanken, PKbanken

Skandinaviska Enskilda Banken

Société Générale

Sumitomo Finance International

Svenska Handelsbanken Group

Placing Agent

Merrill Lynch Capital Markets

Underwriters Agent

Skandinaviska Enskilda Banken

December 1984

International Mergers and Acquisitions

VENDAMERICA, INC.
a subsidiary of
Vendex International B.V.
has acquired
a controlling interest in
Retail Leisure, Inc.
We initiated this transaction
and acted as financial advisor to
Vendex International B.V.

CITICORP
has sold its interest in
Grindlays Holdings plc
to
**Australia and New Zealand
Banking Group Ltd.**
We acted as financial advisor to
Citicorp in this transaction.

BUNZL PLC
has sold
Carter Brothers Limited
to
Evode Group plc
We initiated this transaction,
assisted in the negotiations and acted as
financial advisor to Bihel plc.

VENDAMERICA, INC.
a subsidiary of
Vendex International B.V.
has acquired
a minority interest in
Barnes & Noble Bookstores, Inc.
We acted as financial advisor
to Vendex International B.V.
in this transaction.

CITICORP
has acquired
Vickers da Costa (Holdings) plc
We acted as financial advisor to
Citicorp in this transaction.

**ELF AQUITAINE TRIAKO
MINES LIMITED**
a subsidiary of
Elf Aquitaine
has acquired
Triako Mines N.L.
and
Buka Minerals N.L.
We acted as financial advisor to
Elf Aquitaine Triako Mines Limited
Triako Mines N.L. and Buka Minerals N.L.
in this transaction.

REED INTERNATIONAL PLC
has sold
Deerfield Specialty Papers, Inc.
to
O.P.C. Corporation
through a leveraged buyout
We initiated this transaction and
assisted in the negotiations for
Reed International plc.

CITICORP
has acquired
**Grindlay Brandts
Insurance Brokers Ltd.**
We acted as financial advisor to
Citicorp in this transaction.

COSTAIN GROUP PLC
has acquired
Land & Marine Engineering Ltd.
from
Royal Boskalis Westminster nv
We initiated this transaction
and acted as financial advisor to
the Costain Group plc.
**CITICORP
INTERNATIONAL BANK LIMITED**

A. F. BUDGE (MINING) LTD.
through its wholly-owned subsidiary
Phoenix Mining Corporation
has acquired
S.S. "Joe" Burford, Inc.
from
Valley Industries, Inc.
We initiated this transaction,
assisted in the negotiations and
acted as financial advisor to
A. F. Budge (Mining) Ltd.
**CITICORP
INTERNATIONAL BANK LIMITED**

G-P INVERESK CORPORATION
a subsidiary of
Georgia Pacific Corporation
has sold
Inveresk Stationery Limited
to
Chapman Industries plc
We acted as financial advisor to
G-P Inveresk Corporation and
Georgia Pacific Corporation.
**CITICORP
INTERNATIONAL BANK LIMITED**

CASCADE GROUP
has sold
Cannon Assurance Limited
to
Lincoln National Corporation
We initiated this transaction
and acted as
financial advisor to Cascade Group.
**CITICORP
INTERNATIONAL BANK LIMITED**

This is a selection of transactions
completed on behalf of our clients
during 1984



**CITICORP
INTERNATIONAL BANK LIMITED**

Citicorp has Merger and Acquisition professionals in:
London • New York • Frankfurt • Milan • Johannesburg
Hong Kong • Tokyo • Sydney • Sao Paulo

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Continued on Page 26

KRUGERRAND
Money you can trust.
Please note that International Gold Corporation does not provide a buying or selling service.

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

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Continued on Page 34

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

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FT UNIT TRUST INFORMATION SERVICE[illegible]

Bank Accounts	\$10.0	\$26.4	+16.4
Real Estate	11.0	25.0	+14.0
Stocks	12.0	24.0	+12.0
Bonds	13.0	23.0	+10.0
Auto & Personal	14.0	22.0	+8.0
Life Insurance	15.0	21.0	+6.0
Health Insurance	16.0	20.0	+4.0
Farmland	17.0	19.0	+2.0
Special Stocks	18.0	18.0	0.0
Other	19.0	17.0	-2.0

Prices as of Jan. 10, Daily Market
For other prices telephone 1272-25554

Colonial Marine Group		
24 Lighthouse Hill, LC44 #80.		
24 Lighthouse Hill Assoc.	\$100.00	\$100.00
Capital	100.00	100.00
Reserve	100.00	100.00
Profit	100.00	100.00
Income	100.00	100.00
Assets	100.00	100.00
Liabilities	100.00	100.00
Equity	100.00	100.00

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Assets	100.00	100.00
Liabilities	100.00	100.00
Equity	100.00	100.00

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Profit	100.00	100.00
Income	100.00	100.00
Assets	100.00	100.00
Liabilities	100.00	100.00
Equity	100.00	100.00

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- 14 Mint packet? (7)
- 17 This parting is not a big break in theatre (8)
- 18 Neglect study, lead on (8)
- 19 She is so well-bred, idly playing in Rydal perhaps (8)
- 22 House carried for later assembly (6)
- 23 A ship has trouble under attack (6)
- 24 Might a thousand clues go wrong? (6)

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Octagon Unit Trust Mgrs Ltd			
54 Fenchurch St, EC3A 4BY	02-265 0272		
Secrecy Trust	55.2	55.4	3.00
Opportunityshare Fund Mgt Ltd			
66 Cannon St, London EC4A 3AE			
Opportunityshare Trusts			
International Growth	36.8	40.7	56.85
International Income	36.8	40.7	56.11
International Property	36.8	40.7	56.11
Special Securities	39.2	52.4	1.62
Special Securities II	39.2	52.4	1.62
Special Securities III	39.2	52.4	1.62
Japan Growth	34.6	36.8	—
Prudential	—	—	—
Prudential (Units)	39.7	42.3	0.5-2.5
Accum. Units	45.7	74.2	4.0-3.3
Pearl Trust Managers Ltd. (0)(9)(2)			
322, High Holborn, WC1V 7TB			01-405 9481
Accum. Units	71.3	66.8	2.48
Accum. Units Fd	71.3	47.8	2.48
Accum. Units Fd	71.3	47.8	2.48
Pearl Inc	65.9	65.9	1.51
Pearl Inc Units	65.9	65.9	1.51
Accum. Units	147.1	150.3	3.86

INSURANCES

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General Fund	257.4	216.7	+20.8	M. American Fd.	11.87	11.45	+2.0
Depository	25.7	25.7	0.0				
Equity & Loan (Managed Funds)				Irish Life Assurance Co. Ltd.			
Equity & Loan High Income			-0.49	Loughlin House, 27, Colman St., SCL			01-429-1731
Equity Fund	278.3	278.3	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund II	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund III	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund IV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund V	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund VI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund VII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund VIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund IX	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund X	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XIV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XVI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XVII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XVIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XIX	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XX	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXIV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXVI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXVII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXVIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXIX	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXX	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
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Equity Fund XXXV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXVI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXVII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXVIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XXXIX	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XL	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XLI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XLII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XLIII	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XLIV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XLV	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
Equity Fund XLVI	286.4	286.4	0.0	Property Assured Bldg.	25.21	25.21	0.0
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FINANCIAL TIMES SURVEY

Commercial Vehicles

Declining export orders have resulted in substantial over-capacity, forcing manufacturers into intense competition. The prospect of recovery in demand in Europe and the export market is remote

Price conflicts add to burden

By Kenneth Gooding
Motor Industry Correspondent

THE MOST severe symptom of the malaise which currently afflicts Western Europe's heavy truck industry was to be found last year in France. Importers took advantage of a temporary weakness in Renault's domestic production, and its market share dropped quickly to an abnormally low level.

RVI, in the belief that the loss in share could become permanent if the importers were allowed time to build up stronger dealer and service networks, decided that its main short-term objective should be a fast recovery in market penetration. The objective was achieved and RVI's share moved back from 36 per cent to more than 42 per cent, amid protests from competitors. The state-owned group had set new records for discounting.

The price war eased towards the end of 1984 because, as M Bernard Hanon, president of Renault, points out: "Once the importers realised that we were determined to do—and spend—what was necessary to regain our normal truck market share, they decided it was a battle nobody could win and moderated their own price-cutting."

While the battle was fiercest in France, the struggle between the truck producers last year was not confined to that market. As export orders, particularly from the Middle East, declined at an alarming rate, the European makers had to look to their home territories to find the sales to keep their factories working at reasonable levels of capacity.

According to Scania, total West European truck exports to the Arab countries—including the key markets of Iran and Iraq—in 1984 probably fell to a level lower than the very poor total of 30,000 for 1978. Since then exports to these countries rose to 46,200 in 1980 and a peak of 82,400 in 1981. They remained at a high level—

80,400—the following year but the slide started in 1983 when exports sank to 42,000. This led to substantial over-capacity in Europe and, in the words of Mr Sten Langenius, president of Volvo, the other Scandinavian heavy truck group: "Today there is always some company in a desperate situation—cutting prices and dumping to survive."

The prospect of some surge in demand in Europe and export markets to bring relief from the competitive pressures is very remote indeed. Not one of the major truck companies believes that European output of vehicles over 3.5 tonnes gross weight will ever again return to the 406,700 achieved in 1980.

Last year, output fell by nearly 8 per cent from 278,300 in 1983 to 256,900, according to estimates by DRI Europe which also suggests that, after four years of decline, the bottom has been reached. DRI predicts a useful 12 per cent increase in production of over 3.5 tonners in 1985 to 288,600.

Protect

But "almost certainly fewer trucks will be manufactured in Europe in 1985 than were in 1980, so rising domestic production is a possibility open to few," says DRI in its latest European Trucks Forecast Report. And the medium-term

will be marked by an increasing proportion of truck assembly moving to customer countries as companies attempt to protect their shares of vital markets.

DRI suggests, for example, that there will be some speeding up in the migration of truck production from Europe to Iran, Iraq, Algeria and, perhaps, Egypt.

However, although the European truck industry is in a state of disequilibrium, so far there has been no real sign of any major restructuring.

At Daimler-Benz, the major heavy truck producer, there are no doubts about why this is so. Herr Hans-Jürgen Hinrichs, the sales director, says: "Quite frankly, the natural selection process through the mechanism of the market no longer functions in broad sections of the European commercial vehicle industry because of government support for the makers."

"Herein lies basically the root of what is so lamented on all sides as 'price and terms competition,' with no individual manufacturer being able to escape this vicious circle."

Scania's director of information, Mr Kaj Sandell, has made the assertion that no more than four of the world's producers made a profit on truck building in 1983 (although he excluded Paccar from the reckoning because he was not familiar enough with that group's balance sheet).

The State-owned loss-makers in 1983 included RVI, with a deficit of FF 1.9bn (\$193.5m); Leyland in the UK, £70m in the red; Daf of the Netherlands lost was Fl 27m (\$7.7m) while that of Spain's Enasa was Ptas 2.8bn (\$16m). Mack Trucks, RVI's 46 per cent-owned associate in the U.S., chalked up a loss of \$28m for 1983.

They were by no means the only companies to incur substantial losses that year. Iveco, Fiat's subsidiary, lost Fl 232.8m (\$66.4m) — the company is registered in Amsterdam — MAN in West Germany lost DM 148m (\$48.3m) in the year to June, 1984, while in Britain Bedford, the General Motors business, lost £55.3m.

Impact

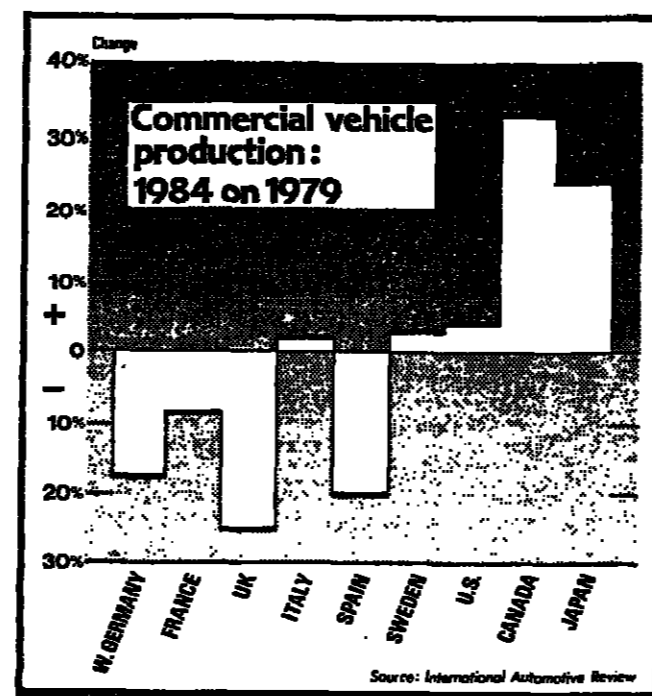
Obviously something had to give. And while there has been no restructuring of the European industry so far, there has been considerable recent rationalisation by the individual companies. Leyland in May last year announced the closure of its export truck plant at Bathgate in Scotland over the following two years; Iveco shut down its medium truck plant at Trappes in France; MAN, Daf and RVI have retrenched their operations.

The impact on jobs of the drop in demand for European trucks has also been consider-

The leading manufacturers
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able. MAN has cut 6,000 jobs since October 1980 and now has a workforce of about 15,000; Iveco has reduced its headcount from 48,000 to 37,000 in three years; Leyland now employs 12,000, a drop of 7,000 since 1982, while RVI's labour force is down from 27,500 at the end of 1982 to about 23,200.

Apart from cutting overheads, some of the smaller manufacturers have been looking for ways of sharing the heavy cost of designing, engineering and producing key components such as engines, axles and transmissions.

Mr Art Van der Padt, chairman of Daf, maintains: "Europe is ahead of the world in commercial vehicle technology and we must see to it that this important industry is kept alive and sound in Europe."

"Co-operation is an important part of that process. The European industry will have to co-operate across national borders or eventually the Japanese and U.S. companies will take most of the business."

Daf, with an output of only about 14,000 trucks a year, has been forecast among the European groups seeking co-operation with its rivals. It recently completed arrangements with Enasa for the joint development and production of a cab for vehicles of 14 tonnes upwards.

MAN is another company not averse to the co-operative approach to survival. It produces medium-weight vehicles jointly with Volkswagen and has been having talks with Bedford about an exchange of truck parts.

Iveco, on the other hand, seems more interested in joint ventures for components—with U.S. groups Rockwell for axles and Eaton for transmissions.

Outside Europe, the Japanese companies have not been able to escape unscathed from the drop in orders from the Middle East and important markets in Africa such as Nigeria. However, after a sharp decline from 930,000 medium and heavy trucks in 1981, Japanese output seems likely to

have surged back to 940,000 last year.

The resurgence has come mainly for trucks of up to six tonnes carrying capacity. Japanese exports of medium and heavy trucks are estimated by the Economist Intelligence Unit to have totalled about 336,000 in 1984 against 314,225 the previous year.

Heavy commercial vehicle demand in the U.S. up to the first half of 1983 was so poor that both General Motors and Ford took rather half-hearted measures to see if it was worth staying in the business. And both came to the conclusion that it was worth the effort.

Mr Edson Williams, Ford's vice-president and general manager of the group's truck operations, points out that "quitting is harder than stay-

ing."

Last year, however, demand in the U.S. picked up dramatically. In the heavyweight, class 8 sector, for example, production jumped from about 75,000 in 1983 to an estimated 130,000.

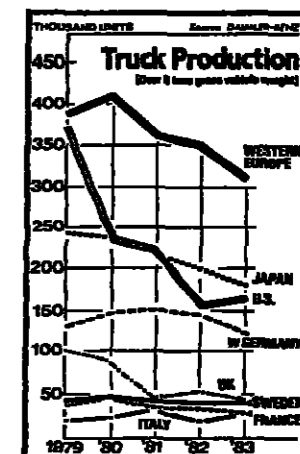
Even so, towards the end of the year some companies—notably Mack, Ford and International Harvester—called back output so as not to allow stocks to climb too high.

The reasons: U.S. class 8 truck production in the middle of 1984 was running at an annual rate of 165,000 and the consensus of opinion seems to be that 1985 demand will be around 120,000.

Advantage

The European truck producers, unlike their colleagues in the car business, are not yet sufficiently established in the U.S. to take full advantage of the boom currently in progress. But the upturn in the States has been very welcome because it has enabled Volvo, Daimler-Benz and Iveco's subsidiaries in the U.S. to make profits in 1984 while RVI's associate Mack, has also returned to the black.

RVI probably sent 6,000 trucks for sale by Mack in the U.S. last year—roughly 15 per



cent of its total output in France.

Some European companies which did not have a chance to buy their way into the U.S. when local companies came up for sale during the recession at the end of the 1970s and beginning of the 1980s, still intend to move into the States—the world's largest market for heavy trucks.

Both Scania and MAN recently announced plans to take their first tentative steps into truck assembly in the U.S. Similarly, so have Hino and Mitsubishi of Japan been preparing the ground as part of a long-term strategy for the U.S.

Meanwhile, back in Europe, the local producers are bracing themselves for more of the same in 1985 as orders from the Middle East continue to dwindle and demand in Europe itself grows at only a snail's pace.

Price competition is bound to be as widespread as ever but should not reach the levels of 1983 and 1984. There have been reductions in capacity in France, Italy and the UK and several companies—Daf, Iveco, MAN and Leyland among them—have publicly stated that they intend to concentrate on cutting costs, to match expected demand and return to profitability, rather than chase elusive increases in market share.



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Harry Rawlings, Transport Manager, Sketchley.

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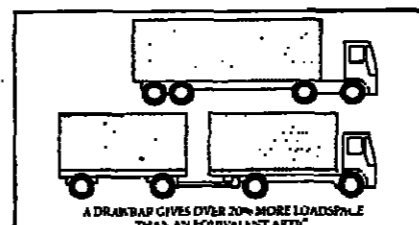
And a cost analysis showed they would cut the total cost of operation by almost half.

Surprise savings.

As well as basic economies like tax (£450 less per truck, compared with an artics running at equivalent GCM) Harry found some remarkable knock-on savings.

Using existing demountable bodies saved £80-90,000. And the drawbar chassis cabs could be used for local delivery work.

There was money to be saved on



tyres: drawbars mean far less tyre scrub than artics.

And, as drawbars are much easier to handle than artics, the existing HGV3 workforce can drive them—legally and above all safely.

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To get artics close to the right loading bay, Sketchley would have had to knock down part of a factory—the board actually approved the demolition. But the drawbars could operate in the existing space.

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Commercial Vehicles 3

Pledge to raise market share

THE DEEP recession in heavy truck sales in North America and Western Europe caused General Motors, the world's largest automotive group, to make a careful examination of the potential for that segment of the commercial vehicle market.

As a result, GM recently assured dealers around the world that "we are in, and intend to stay in, the heavy truck business and to increase our market share," according to Mr Don Atwood, executive vice-president in charge of worldwide truck and bus group, power products, defence and component operations.

He says there is no question about the potential strength and profitability of GM's vans and light-duty truck operations. But both medium and heavy trucks had caused some concern when the volume of sales dropped so far during the recession in the early 1980s.

"We did a detailed evaluation of both markets and decided both are viable. Medium-weight trucks are very important to us, both in the U.S. and Europe. We will continue to be an important part of the medium market."

"Heavies were more difficult to evaluate because even the most optimistic forecasts said sales would not get back to the

peak levels of 1978—and the market is crowded with many competitors."

"But we feel it will be viable for those who have advanced technology and whose products emphasise fuel economy and low maintenance."

Two years ago, GM set up its world truck and bus group, based at Pontiac, Michigan, and integrated its commercial vehicle engineering and manu-



facturing operations. This included the Brazilian subsidiary, Bedford in Britain, Chevrolet, GMC and Detroit Diesel Allison in the U.S.

Mr Atwood says that all product-planning and engineering is now co-ordinated from Pontiac, with Chevrolet, GMC and Bedford providing the main engineering centres.

"Bedford will be an integral and important part of the world truck group," Mr Atwood maintains. Bedford's engineering and product-planning functions have been merged with other GM companies and its manufacturing operations will also be

controlled from Pontiac. However, it retains some autonomy in respect of its UK marketing.

The "world truck and bus" concept within GM goes back to September 1979, when it set up a group within the Warren, Michigan, research and development centre to see what could be done to spread the cost of developing new truck components across all the GM companies — particularly as the vehicles built in various parts of the world were becoming more similar.

The Warren research suggested that, in medium trucks especially, GM could gain from developing common engines, transmissions, clutches and axles, and possibly even frames and cabs.

The way this might work in future can be judged from what GM has in mind for Bedford. Instead of manufacturing nearly all the key components for its trucks, Bedford, when "world" truck production begins, would make one or two on a large scale for its own use and for distribution to other GM companies.

In turn, they would produce components on a large scale, some for Bedford, which would use them in the trucks assembled in the UK.

Mr Atwood says that within

this decade there will be common medium trucks emanating from the work done during the Warren phase of the programme. It will take longer for the "world" vans to make their appearance, but again they should be on sale before the 1990s.

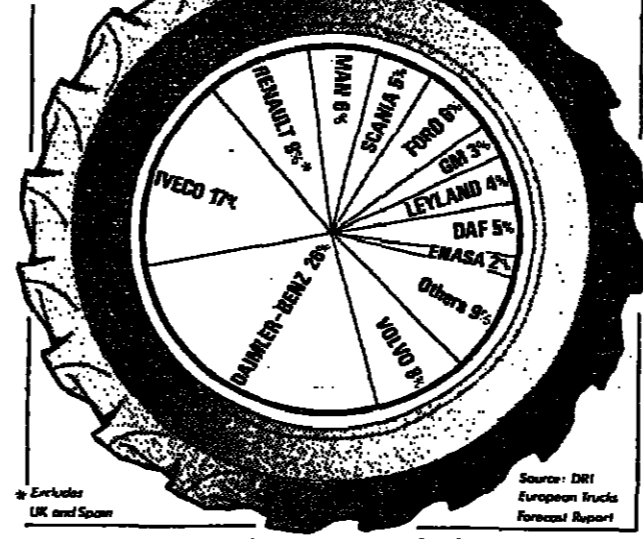
GM has been preparing its commercial vehicle distribution networks around the world for the day when the new products emerge.

Mr Atwood explains that in countries such as the UK and Brazil where GM has production facilities, the local GM company has responsibility for marketing commercial vehicles. However, in "neutral" markets, distribution will be handled by companies set up jointly with Isuzu of Japan, in which GM has a 36 per cent shareholding, and an option on a further 43 per cent.

Isuzu is also being treated as an arm's length supplier to GM's world truck business. It is supplying a medium, cab-over-engine truck for the U.S., sold with a Chevrolet badge, while Bedford used an Isuzu design, and is importing Isuzu engines, transmissions and other components for its recently-introduced Midi van.

Once again, the Midi van uses a local label, Bedford, in line

Truck Market Shares in Europe over 6 tonnes 1983



* Excludes UK and Spain

Source: DRI European Trucks Forecast Report

with GM's policy of getting the most from the goodwill attached to the names it owns.

GM, however, has no intention of handing over the benefits of the joint distribution deal to an arm's length supplier in Japan, Mr Atwood says. As much as possible is being done to upgrade the Bedford products until that company, the U.S. operations and GM's Brazilian subsidiary can be put on a

better footing to compete with the Japanese.

Mr Atwood says: "In five years we will have a technological lead with such things as electronic fuel injection, electronic transmission controls and built-in diagnostics to cut maintenance costs. That technology will not be available to Isuzu. So we should win on total cost of ownership rather than initial cost."

World truck nears launch

FORD'S "world" truck will go on sale this year. It will have a European cab, a North American chassis and a diesel engine developed from one used by the group's agricultural tractor division. The components will be assembled in Brazil.

The first "family" of designs for the new medium-to-heavy range is aimed primarily at the Brazilian and North American markets where the first products will go on sale in the autumn.

Mr Edson Williams, Ford vice-president and general manager of the group's truck operations, says: "The Brazilian world truck takes the best we have within Ford and puts it together."

The company has the capacity to build about 40,000 a year.

The cab will be adapted from the one used for the Ford Cargo range in Europe. Cab panels will be sent from the UK to Brazil for the new vehicle.

But the heavy cost of transport to Europe and the 14 per cent tariff barrier it would face before entering the EEC makes it unlikely that built-up trucks will find their way from Brazil to Europe, Mr Williams says.

However, Mr Williams reveals that other export markets are being considered and there seems to be potential in Asia.

Ford has invested about \$100m in a new diesel engine plant in Brazil which will come into operation shortly, providing power units mainly for the domestic market. The engine is a six-cylinder, direct-injection 7.5 litre unit. There will also be an option of the existing Ford 6.6 litre turbo engine, but in a South American version. Output of 55,000 engines a year is envisaged.

The company will start by building what are known in North America as Class 6 and 7 trucks (medium-weight). Eventually heavyweights (Class 8) versions will be introduced—but using bought-in engines, because Ford has no intention of developing a 10-litre diesel engine of its own, Mr Williams points out.

The Brazilian project is part of Ford's response to the substantial over-capacity for heavy truck manufacturing worldwide.

Ford can simplify its heavy truck designs worldwide and establish those parts of the truck which could be made common to Ford vehicles the

world over.

He looks ahead at the time when "components for our heavy trucks will be of a single, world-class design and will be built in a number of countries. We will buy from those international suppliers who can supply in the countries where we assemble trucks and need the components."

A locally-produced ZF gearbox will be used in the Brazilian-built "world" truck for instance.

Ford began working its world truck programme in 1982. It will take another eight years to complete, says Mr Williams.

"We must prove it can work



and that we can make money on heavy trucks."

The company will spend about £1bn on truck development and production over the four or five years from 1983 out of its worldwide budget of £4bn. Britain will receive about 80 per cent of the £1bn for trucks.

This is because, although the group has truck plants in Australia and Brazil, the two big design centres are in the U.S. and Britain.

Ford makes a profit on its total commercial vehicle operations but its strength is at the light end—with the Transit van and car-derived vans in Europe and with pick-up trucks and vans in the U.S.

However, the launch of the Cargo range in March 1981 at the cost of £125m was proof that Ford wants to win a much larger share of the European market for medium and heavy trucks.

The Cargo got off to an inauspicious start with many niggling problems and recalls by the company to put them right. Ford's share of the West European market for trucks of more than 3.5 tonnes, which stood at 7 per cent in 1980, has shrunk to just over 6 per cent.

With the full Cargo range in place and the initial technical problems behind it, Ford will concentrate on building sales, particularly in the UK, and getting some return on its investment.

Confident of return to profitability in three years

ONE SHORT year ago, M Pierre Semerena, then president of Renault Vehicules Industriels, said boldly that his company's first task was to stop the steep slide in market share in France and to claw back to a "normal" level of penetration.

RVI was willing—with the backing of its State-owned parent group—to spend as much as necessary. That decision, and the bloody price war which ensued in the French truck market early last year, has sent convulsions through the European industry.

RVI had emerged from the merger of the Berliet and Saviem groups in France and more recently added the truck business Peugeot picked up when it acquired Chrysler's European assets.

For the French, there was no point having a "national champion" in the business if it was to be demolished by importers.

According to M Semerena, the importers took advantage of a fall in RVI's new model introduction programme to push the French group's

market share to abnormally low levels: it dropped to 36 per cent.

RVI achieved its objective very quickly. It has pushed its way back to a 42 per cent domestic market share. M Semerena says that RVI's main priority now is to return to profitability while maintaining its "normal" French market share.

"We will only try to improve market share again when prices have stabilised," he maintains.

M Semerena feels confident enough about the future to predict that RVI could return to profit in 1987 or 1988. "We are on a slow road to recovery," he says.

Partly as a reward for his efforts, M Semerena was promoted last month to become chief executive of Renault's car division—which also has more than its fair share of problems. His successor is M Philippe Gras, formerly the marketing and commercial director of RVI.

In the first half of 1984, RVI lost FFr 1.6bn following a FFr 1.95bn loss for the whole of 1983. M Semerena indi-

cates that RVI's 1984 losses might be larger than the previous years, even though it half.

The first-half deficit included FFr 200m in special charges connected with the company's job reduction programme—1,500 have gone since the beginning of the year when the workforce was about 28,000.

M Semerena says that RVI has also cut value of its vehicle stocks by FFr 850m in the past year, reducing the number of trucks from 9,000 to 5,000.

The brightest part of the RVI business in 1984, as for some other European manufacturers, has been its U.S. operations. Since 1979 the French company has had a shareholding in Mack Trucks, a stake that now stands at 46 per cent.

Mack is benefiting from the recovery in demand in the U.S. and will sell more than 24,000 trucks this year, against 14,000 in 1983 — still well below the 40,000 for 1979. Of the 1984 total, about 6,400 will be imported from Renault in France and sold as Mack Midliners.

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liners for Mack "to protect our position."

In particular, RVI has its eye on the potential competition from the Japanese, as both Hino and Mitsubishi have entered the medium truck market in the U.S. with cab-over vehicles.

Back in Europe, the former

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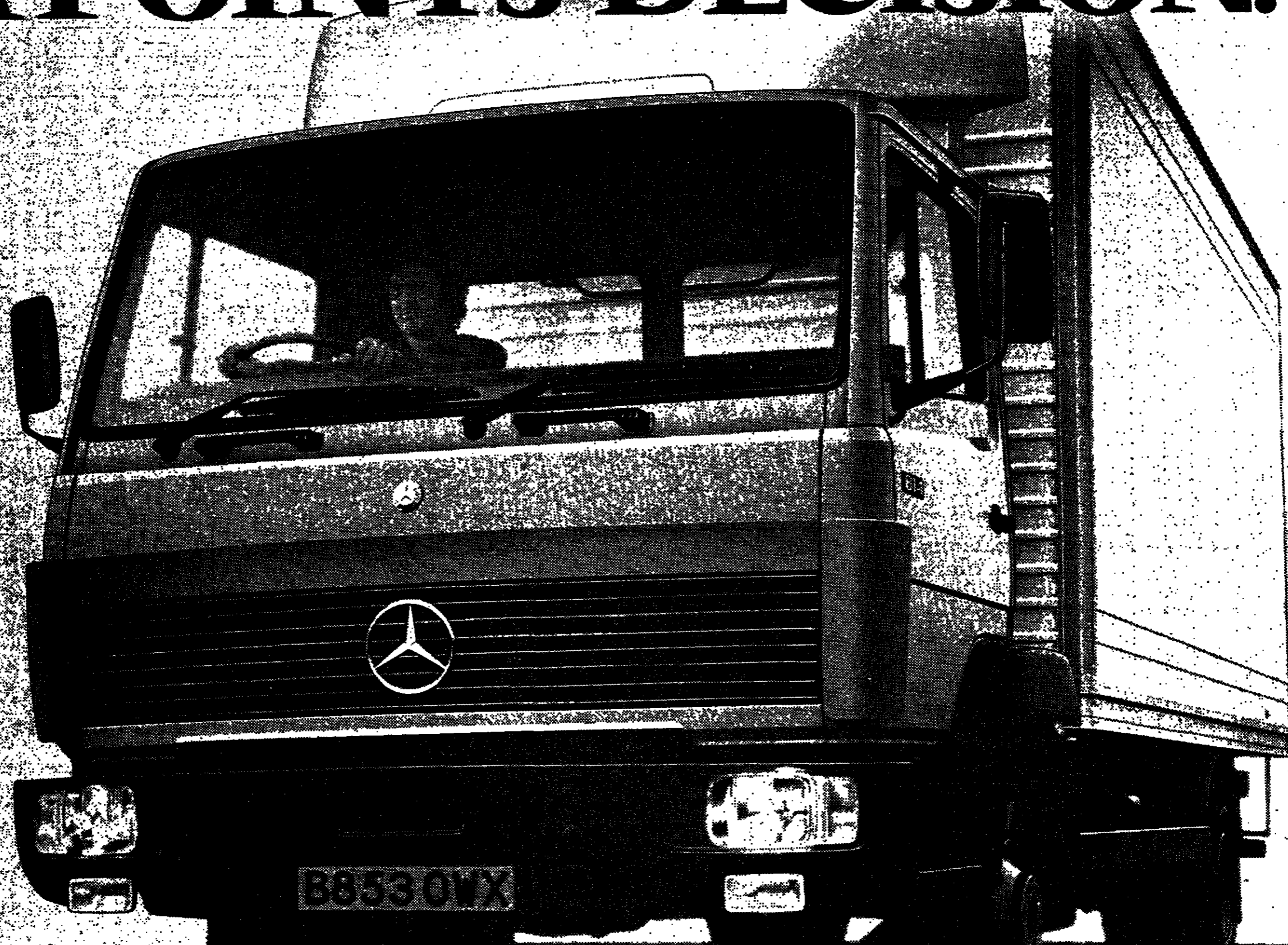
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Commercial Vehicles 7

U.S. truck production

	GMC & Chevrolet	Ford	Chrysler (Dodge)	AMC (Jeep)	VWA	Int. Harvester	MACK	Nissan	Mercedes-Benz	Others	Total U.S.
1979	1,352,475	1,032,115	302,995	134,625	2,405	115,455	35,940	—	—	41,835	2,953,035
1980	888,740	581,505	118,230	30,810	28,390	67,855	23,390	—	1,215	32,300	1,638,260
1981	722,590	617,375	98,240	92,250	37,390	62,860	26,090	—	2,565	30,320	1,689,780
1982	896,940	712,425	121,915	85,470	8,085	45,110	14,245	—	2,005	24,900	1,912,100
1983	1,128,945	821,480	147,070	113,265	2,080	51,580	12,485	19,980	3,010	33,050	2,443,635
1984	1,238,590	1,094,965	197,620	174,975	—	70,045	24,715	92,500	2,990	43,280	2,939,790

First 11 months

Research: Rivka Nachama

Year of record figures



United States

THE U.S. commercial vehicle manufacturers will want to forget the early 1980s—the period which brought International Harvester to its knees quickly. But most will cherish the memory of 1984, when sales moved into the second year of cyclical expansion and many manufacturers began to chalk up record figures.

The rebound for some of the lighter weight categories began in late 1982, but for the heavier vehicles the impact of the turn in the economy was not felt significantly until the middle of 1983.

Growth has been all the stronger because of the depth of the recession: a three-year slump in truck sales is itself unusual, but it was made even worse by the fact that at the bottom, in 1980 and 1981, manufacturers were making only half as many vehicles as in 1979. They are recouping the volume losses, with the result that 1984 looks as though it could be a record year.

By the end of last July, commercial vehicle sales had reached 2.3m an increase of 42 per cent over 1983's 1.6m, and slightly better than the 2.25m record set in 1978. Light truck sales jumped by 42 per cent to 2.17m, medium-weight products by 15.2 per cent to 27,000, and heavy trucks by 54.7 per cent to 106,000.

Perhaps the most remarkable aspect of this growth has been the extraordinary strength of sales of lighter weight trucks and vans. This was a sector popularised by the Japanese,

who caught a wave of fashion in California by introducing vehicles which were both utilitarian and recreational. Indeed, Nissan, the second largest of the Japanese companies, chose to concentrate on these small commercial vehicles in its initial manufacturing investment in the U.S.

The U.S. producers have taken the lead from the Japanese and further encouraged sales by launching their own models—in particular the General Motors' S series and Chevrolet Blazer, and the Ford Ranger and Bronco. As a result, the Japanese have sharply lost market share.

These vehicles give the impression of hybrids between vans and cars: clearly stronger and more durable than passenger saloons, and maintaining the high driving position of a van, but marrying this with the comforts of a car.

Brand loyalty

They are also highly youth-oriented, with about 36 per cent of sales to buyers under 30 years of age, against only 24 per cent of all cars. This trend partly explains the concentration of the U.S. producers on this sector, since the aim is to capture brand loyalty as early as possible.

Chrysler has drawn on this trend towards multi-purpose vehicles with its mini-vans, launched almost a year ago. The Chrysler product is no larger in floor area than its conventional mid-range saloon cars, but it is much more roomy inside, capable of seating up to seven in comfort, and converting into a couple of overnight beds.

Consumer response has been so enthusiastic that everyone is following Chrysler into the market, which Mr Lee Iacocca, chairman of the group, can claim as a great marketing success as the Mustang which he

launched at Ford.

The mid-weight category of the commercial vehicle market has proved the main disappointment, with registrations still less than half the peak year of 1978. But heavy trucks had excellent sales last year, running only just behind their records at the seven-month mark.

This rebound has helped International Harvester, which has returned to healthy profits on this side of the business. After the financial devastation of the last three years, it is a much slimmer group, and will probably make fewer than 80,000 vehicles against about 115,000 five years ago. But this will still be much higher than in the intervening period.

The recovery has led to an even stronger performance at Mack, the group in which Renault of France has a stake of just over 40 per cent. Mack, however, may fall short of its 1979 production level of 36,000, because of a dispute over a new three-year pay contract. The company has some flexibility because the stoppage comes at a time when it intended to trim output.

But a long dispute could be damaging at a time when its finances have been depleted by losses of around \$70m in the last three years.

The most interesting developments in the heavy truck sector, however, are not among the domestic producers. Over the last few years, new challenges have gradually been establishing themselves in the North American market, building up distribution chains and working out strategies to attack the market. Among the most aggressive are two European companies, Daimler Benz and Volvo, and some Japanese concerns.

After several years of trial and error, both Daimler and Volvo decided in 1981 to take the bull by the horns and establish themselves in the market by buying out local companies. Volvo picked up some of the assets of White, including a manufacturing plant, while Mercedes—which had earlier had links with White—looked over Freightliner in Oregon.

Both have taken a gradualist approach, basing sales on existing products in the companies taken over, but steadily introducing elements of their own European lines. The intention is to introduce more European technology.

Kits

Daimler Benz, for example, began in the U.S. about 10 years ago, importing directly. But in 1980, it started local assembly from kits brought from its Brazilian subsidiary. It has grafted Freightliner onto this enterprise, and is looking at the possibility of putting its own components into the Freightliner range.

On the basis of a combined U.S. produced and imported sales, Mercedes is the largest of these foreign manufacturers. Registrations were running at a little over 900 of its own vehicles at the half-way mark, plus a further 7,250 of the Freightliner models. Volvo had sales of 880, along with 3,400 White models.

Hino, the leading Japanese heavy-truck manufacturer, has gone a different route, using its base in Florida to assemble vehicles made in Japan. It has limited sales in the U.S. and its longer-term manufacturing aims remain to be seen.

But it is widely believed that Hino's arrival is the harbinger for a much broader-based assault by the Japanese on this part of the vehicle market, about the only sector that they have not tackled in the U.S. Nissan Diesel, Isuzu and Mitsubishi are said to be interested.

Terry Dodsworth



France

Recovery after the price war

AN ATMOSPHERE approaching normality has started to return to the French commercial vehicles market. The sector has been recovering from a price war of ferocious intensity which left all the main manufacturers in an even more battered financial state than before.

The battle reached a climax when Renault Vehicules Industriels (RVI), the large truck subsidiary of the French state-owned Renault car group, decided to react with a vengeance to the price discounting of its main rivals on the French market. RVI had seen its share of its main market drop from 40 per cent in 1982 to 36 per cent in 1983.

At the same time, its principal competitors saw their share of the French market rise, with Mercedes moving last year to a little over 20 per cent, Fiat-Iveco to 18.5 per cent and Volvo to 10.7 per cent.

Renault felt it could not allow its share of the domestic market to drop any further and decided to pull out all the stops to regain what it regards as an acceptable level of more than 40 per cent with the eventual target of 45 per cent. Although the sector has described the battle that followed as "collective suicide" by all the manufacturers, RVI has succeeded in regaining 42 per cent of the market.

"RVI has—thanks to its overall actions—regained what it had lost as a result of the price war, nothing more, nothing less. And we don't claim to be any more wise nor any more crazy than our main competitors," said M Pierre Semerena, RVI chairman.

He confirmed that the situation was now "a little closer to normal." But prices on the French market, although improving, continue to be well below those of some other big European markets.

Paul Betts

Output up 11 per cent

AFTER THE sharp dip in production in 1982, Japan's output of medium and heavy trucks over the first nine months of 1984 staged a strong recovery. Output was up by almost 11 per cent and likely to reach a record 940,000 units by the year end.

While home demand faltered in the wake of the 1979 oil price shock, Japan's heavy truck producers—basically Hino, Nissan Diesel, Mitsubishi and Isuzu—stepped up their efforts overseas. Spiralling sales to the markets of the Middle East, Africa and South-East Asia combined to carry sales forward to a peak of almost 930,000 units in 1981.

Demand, however, was largely focussed on trucks of up to six tons carrying capacity. The over nine-ton sector has declined sharply since 1979, reflecting poor demand from Japan's depressed construction industry. When a more broad-based recession hit prime export markets in 1982, demand in North America and Africa also dwindled, and truck production fell back sharply as a result.

It was an improvement in domestic orders for medium trucks (four tons carrying capacity) and heavy duty rigid trucks (eight tons capacity and over) which began the recovery in production in 1983.

This reflected a revival in Japan's long-distance freight transport industry, and the beginnings of a recovery in construction activity. Together, these developments outweighed marked rationalisation by the country's freight hauliers which had killed off many single truck operators.

Now some relaxation in the Government's fiscal austerity programme is bringing increased spending on capital works. The industrial private sector is performing strongly and a cyclical surge in replacement demand for trucks is coinciding with some recovery in exports to produce record production levels.

Over the first nine months of this year, the domestic market for medium and heavy trucks is up by almost 12 per cent and a year end figure of 126,000 sales is now in prospect. Discounting remains prevalent.

The form of car-derived vans, light vans and pick-up trucks, Japan rapidly established a global presence in the wake of its passenger car exports. In the medium-heavy truck sector, however, progress has been more modest in developed markets.

The recent slump in demand

by the major markets has heightened competition and reduced margins—particularly unfortunate for Japanese producers who have the added problem of a strong yen. Further to this, the Japanese truck—still basically designed for the domestic market—has encountered some problems in securing market acceptance in a number of industrialised countries.

In Hino's FD series truck, for example, the cab is neither what is conventionally identified as "short" or "sleeper." A valuable and almost 0.5 metre is lost

network with complete service and support back-up for international freight operations.

The downturn in domestic demand, however, prompted Japan's producers to adopt a more forceful stance overseas. First, exports to the developing markets were topped up. There were further inroads into China and India. More overseas assembly bases were established and first tactical moves—including joint ventures—were made towards the U.S. and Europe. It is this last development that is expected to yield greatest results from 1985.

For 1984, however, the major market remains the Middle East, notably Saudi Arabia, Iran and Oman. Algeria and Libya are important customers in North Africa. The principal market in South-East Asia is Thailand, but this is rapidly being eclipsed by deliveries to China.

While Europe takes 23 per cent of Japan's total vehicle exports, it accounts for just over 7 per cent of its truck exports. Japan's medium and heavy truck exports have risen from 275,900 in 1979 to 314,225 in 1983 and 346,695 for January-September 1984, according to JAMA. Year-end exports for 1984 are expected marginally to exceed 336,000 units—a 7 per cent improvement.

Ian Robertson

Truck Production by Loading Capacity

	2-4 tons	5-6 tons	7-9 tons	10-14 tons	15-19 tons	20-24 tons	Special purpose	Total
1979	629,285	34,850	15,775	75,640	18,225	4,890	770,755	
1980	745,265	50,390	18,140	55,245	10,430	5,765	885,200	
1981	794,195	52,310	17,460	51,460	8,115	5,375	928,915	
1982	700,945	33,020	12,450	44,965	12,455	4,863	807,225	
1983	757,040	31,980	9,300	45,710	6,455	3,945	853,530	
1984†	—	—	—	—	—	—	789,550	

† January-September.

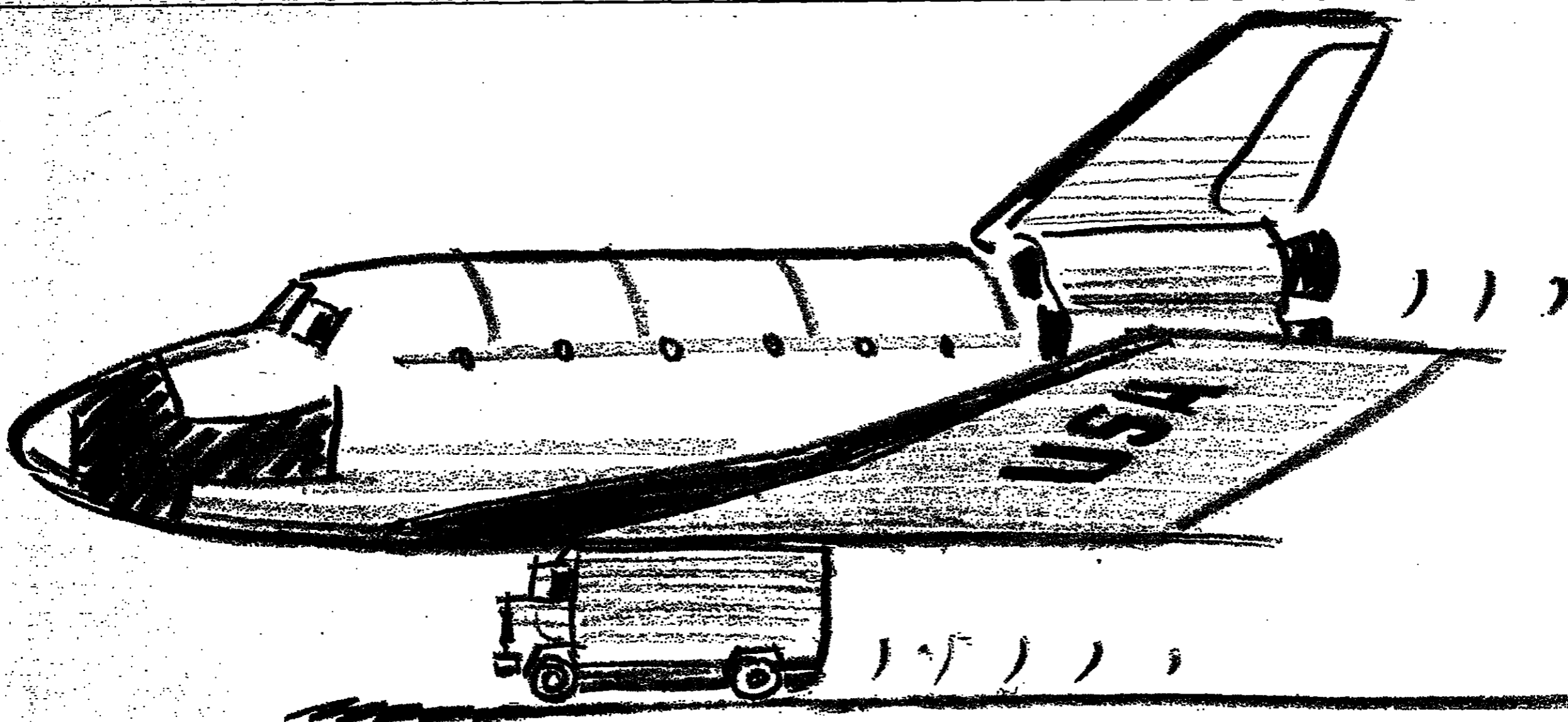
Source: JAMA.

Japan's leading manufacturers—1983†

	Production	Domestic registrations	Exports
Hino	47,845	31,010	16,845
Isuzu	44,495	27,450	18,340
Mitsubishi	39,885	28,150	14,350
Nissan Diesel	36,800	18,150	12,295

† Medium/heavy diesel trucks with payload over 3.5 tons.

Source: JAMA.



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Commercial Vehicles 8

Divided attitudes to joint ventures

A TRUCK manufacturer producing 1,000 vehicles a year would have an average unit cost 50 per cent higher than a manufacturer producing 100,000. One making 10,000 would still have a unit cost 32 per cent higher.

And at the other end of the scale, an industry giant like Daimler-Benz of West Germany would have a unit cost only 85 per cent that of even the 100,000 a year manufacturer.

Even so, the commercial vehicles industry continues to be divided on the detailed merits of joint ventures. Some manufacturers, notably Iveco, Europe's second-largest truck producer, have espoused the concept with enthusiasm. Others, like Daimler-Benz, retain a firm belief in a high degree of vertical integration and the continuing capacity to develop all major components in house.

Daimler-Benz, with a worldwide presence in truck markets, can afford better than most to adopt this view.

These are some, at least, of the conclusions reached by Professor Garel Rhys, the Cardiff-based economist who advises the Commons on motor industry affairs and who was appointed recently to the UK's first chair of the industry.

The statistics, contained in a paper, *Heavy Commercial Vehicles: A Decade of Change*, help to illustrate precisely why

the odds have so consistently lengthened against small manufacturers' survival and highlight why industry pressures have mounted for joint ventures as a means of lowering the unit cost of major components such as engine, transmission, axles, cabs and other parts.

But then very few manufacturers even come close to Prof Rhys' calculations of the optimum level of production to reap maximum economies of scale: 200,000 units a year for cabs, 40,000 for chassis frames, and 200,000 for engines.

Even General Motors during the past year has been showing firm signs of wanting to expand collaborative projects beyond the initial world truck and bus programme it set up at Pontiac, Michigan, a few years ago. This currently links its UK subsidiary, Bedford, and Isuzu of Japan — in which it has a 36 per cent stake — with its U.S. and Brazilian truck operation aimed at creating common vehicles for all major markets.

Recently, for example, GM has been in talks with MAN, the West German heavy truck maker, on possible collaboration, and with Enasa, Spain's principal commercial vehicles producer, on Enasa making a GM van under licence. However, the details of both possible ventures remain imprecise.

Mr Charles Katco, appointed last year as executive vice-

The industry continues to be divided on the merits of joint ventures. Iveco endorses the idea, while Mercedes-Benz takes a different view

president in charge of the GM "world" commercial operation, said during a visit to Bedford: "With both MAN and Enasa, we are looking at all the opportunities which may exist — but we have not reached any definite conclusions."

However, he set the tone for GM's overall approach to collaboration in declaring that the corporation "will look at all possibilities, with any company, where there might be developments of mutual benefit."

With fully-developed "world" trucks still several years away, the type of collaboration at least being considered between Bedford and MAN could be seen as making sound economic sense, given Prof Rhys' figures.

It is possible that Bedford will take front and rear axles from MAN; Bedford truck cabs might be supplied to MAN. Considerable cost savings could be expected to follow, as each

produces only about 16,000 heavy trucks a year.

And there are pressing financial reasons for doing so: Bedford made a £50m loss last year, while MAN's was £39m in its financial year to mid-1983, although its losses have fallen since by about a third.

MAN is one of the few companies with which Daimler-Benz does collaborate, the two companies having exchanged axles and engines for some years. However, MAN was ordered by the West German Cartel Office to end the arrangement by the close of last year — MAN can act now only as a supplier — so MAN has further good reason to seek out other partners.

Collaboration within West Germany has also extended to Volkswagen and MAN. Since the end of the 1970s they have been jointly producing trucks of 6-11 tonnes, the MT range, and share distribution in some

countries. VW makes the cabs, rear axles and gearboxes; MAN the engines, frames, front axles and special bodies.

At the other end of the scale, the small UK heavy truckmaker, ERF, with an output of about 2,000 trucks a year, had also been seeking low-cost access to extra volumes by means of a collaboration deal with Hino, the Japanese truck maker. Under it, ERF would have produced trucks of about 13 tonnes based on a Hino model, but with a minimum UK content of 60 per cent. ERF blames a stronger yen for having to shelve the agreement indefinitely. But illustrative of its strong concern about costs, it has standardised its heavier truck production around Cummins engines. Rockwell axles and Fuller gearboxes rather than offer as a matter of course any combination from a variety of suppliers which customers previously had cared to name.

One of the broad-based joint ventures has involved Eaton, the U.S. transmissions manufacturer, and Iveco following an announcement in 1983 that the two companies would collaborate to develop a range of medium duty transmissions. Already, the range has become a reality, with test units in service in both the UK and on the Continent.

According to Mr Bob Sculfour, regional manager for the UK and Scandinavia, they

will come into production in 1986 and 1987.

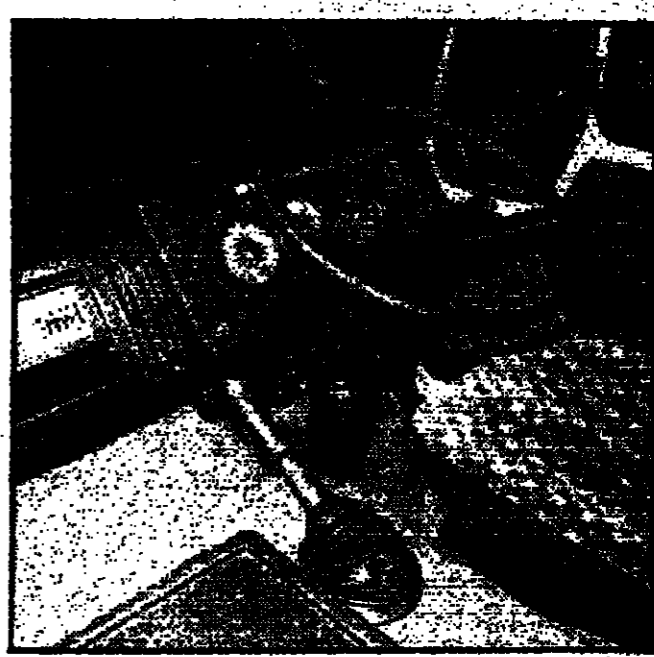
The units will be made at Eaton's Basingstoke plant in the UK and in the U.S., while Iveco will also produce at its Brescia, Italy, plant. Thus if all goes according to plan, Iveco will benefit from shared development costs and the outlet offered by Eaton's worldwide component supply operations, while Eaton gets the benefit of guaranteed volume through Iveco's own truck production. And the price to other vehicle manufacturers can be lowered as a result of the scale economies.

Similar thinking applies to Iveco's collaboration with Rockwell of the U.S., another world-scale components supplier, in the manufacture of truck axles. A joint company, Rockwell-VCC Omivi, is producing them at a plant near Cameri, Italy.

By no means all planned joint ventures have had a happy outcome, however. Leyland Vehicles in the UK had planned jointly with Cummins, the diesel engine maker, to produce a new light truck diesel both for Leyland's use and for sale worldwide.

Investment cutbacks at Leyland, however, meant that last year it had to withdraw from the project. Cummins is now proceeding with development on its own, with production expected in 1986.

John Griffiths



ALTHOUGH new technology has found its way primarily into vital running units of heavy trucks — engines, transmissions and suspension systems — the trend is also visually apparent, especially to the driver.

The Mercedes-Benz cab interior (above) gives an indication of the extent to which new trim materials are being used. Apart from the door window surrounds, painted metal is almost entirely absent. Instead, tough yet light and durable new plastics are employed for fascia panels, steering column surrounds and minor controls.

Plastics have also become acceptable, even by quality-conscious makers like Mercedes, for extraneous components such as bumpers, step mouldings and wing valances.

However, truck makers are having to work hard to convince sceptical fleet operators that their longstanding view of plastics as a flimsy, brittle and cheap material needs to be updated.

Technology at the crossroads

THERE WAS a time, observed General Motors chairman Mr Roger Smith, last year, when innovation could be carefully phased in. A new technology could be thoroughly developed in one model, and carefully applied across the board.

But, he pointed out, competitive pressures now require new technology to be presented to buyers much faster, with "profound effects not only on products, but the plants where they are made and the work forces producing them."

From now on, he warned, "if we manufacturers are to succeed — indeed, to survive — the cars and trucks of the future must be state-of-the-art and they must be built in the factory of the future by the work force of the future."

Over the past 12 months, the world's largest vehicle maker putting its funds and resources has been increasingly busy in the direction pointed out by Mr Smith.

The acquisition of electronic systems and data concerns, the signing of a joint venture with a Japanese manufacturer to produce robots in the U.S., the just-announced commitment to the "Saturn" car project which, with new manufacturing systems, is intended to allow GM to actually beat the Japanese on costs in the small car sector — all are aimed at ensuring GM's long-term competitiveness at an international level.

And during last year another major component fell into place in GM's strategy to apply to commercial vehicles the "world" approach to models and production already instituted with cars.

As the result of an \$8m investment, the design operations of its Bedford commercial vehicles subsidiary in the UK are now linked directly to the mainframe computer at Pontiac, Michigan, where GM's world truck and bus division set up over two years ago — is overseeing the design and development of a range of "world" trucks and vans which will emerge by 1990.

Key input

Bedford, which had been responsible for GM's commercial vehicle operations in Europe for some years, is seen as having a key input to the design of these products. And while GM considers the \$8m so small that it did not bother to even include it in its announced investment figures for Bedford facilities, the result is far-reaching.

For the first time, designers a continent apart can "talk" to each other directly and immediately on the product under development. Each design screen at Luton links direct to the UK mainframe computer; the mainframe is directly linked, and so are the design screens at Pontiac. Time and cost savings, say GM officials, vastly outweigh the size of the investment.

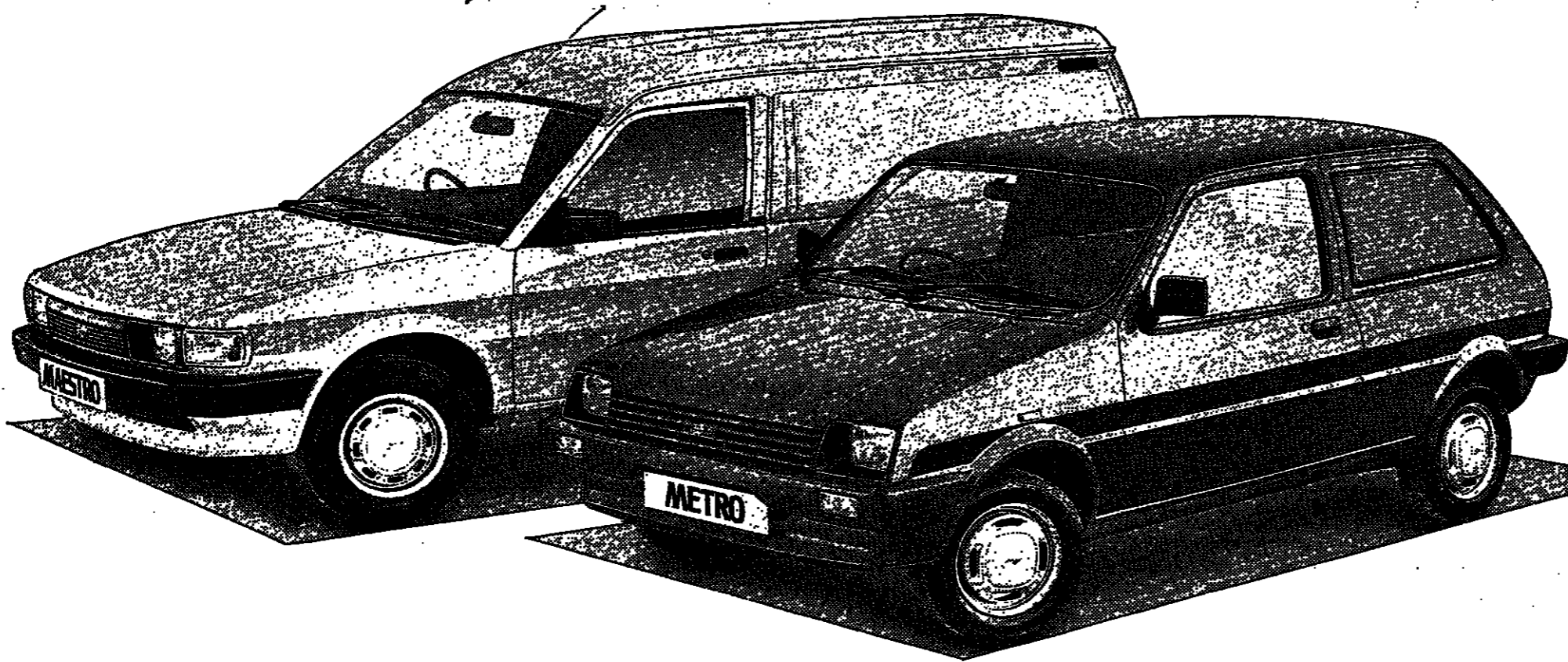
It represents just one example, however, of the way in which commercial vehicle producers are using new technology in their operations, much of it transferred from its initial applications on cars. Daimler-Benz' plant at Wertheim, on which the company has spent over \$300m, provides another example of the car-to-trucks technology transfer. The plant produces both complete vehicles and cabs. The latter are made on the unitary principle, under which the same parts can be put together in different ways to suit a variety of vehicles.

John Griffiths

AUSTIN ROVER

THE NEW AUSTIN VANS.

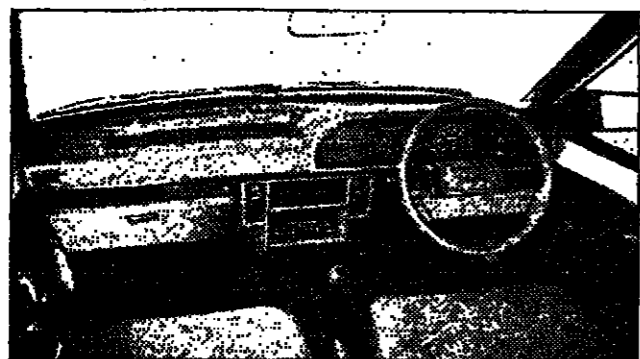
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AUSTIN MAESTRO L VAN INTERIOR.

load space. And the new Austin Maestro Van range has over 85 cu.ft* and a choice of 500 and 700 kg. models.

HOW ABOUT THE DRIVERS?

The driver gets plenty of attention too, with the comfort, equipment and handling usually reserved for passenger cars. Handling brought about by the benefits of

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As for economy, the Austin skill at delivering more miles per gallon produces car-like figures; The Metro 1.0 litre produces 59.7 mpg* and the 1.3 litre Maestro 500 can achieve over 45 mpg*.

WHAT ABOUT PRICE?

The prices are better too. For example, although the 500 and 700 kg Maestros carry more than their nearest rivals, they cost a little less.

HOW ABOUT SOME DETAIL?

Being truly purpose built, the new Austin Vans are better right down to the last detail. Taking Maestro, for example, heavy steel bumpers, securely recessed headlamps and slam-lock rear doors opening through 180°, are all designed for heavy use. And so is the large flat payload floor with its recessed anchor points.

Metro shares many of the same features, with a wide, deep tailgate giving clear access to an equally flat payload

floor. Both vans offer a choice of City models, or even more specification and comfort on the 'L' models.

Austin Vans are built to last, using the same paint protection process that qualifies Austin Rover cars for their 6 year corrosion warranty. Further assurance comes with the comprehensive benefits of Supercare, Austin Rover's complete customer care plan.

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*Manufacturers' figs. Metro 1.0 L simulated urban cycle 45.7 mpg (62 L/100 km), constant 56 mpg 59.7 mpg (47 L/100 km), constant 75 mpg 40.2 mpg (70 L/100 km). Maestro 500 HC simulated urban cycle 35.2 mpg (80 L/100 km), constant 56 mpg 45.7 mpg (62 L/100 km), constant 75 mpg 32.3 mpg (87 L/100 km). *Manufacturers' data. Prices correct at time of going to press excluding number plates and delivery. Models shown Metro 310 L 1.3 L at £4,196 and Maestro 700 L at £5,347.